



Environmental Assessment for the Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley Air Force Base, Colorado



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14. ABSTRACT

In order to meet the requirements of Air Force Instruction (AFI) 34-262 Service Programs and Use and Eligibility, and AFI 34-110, Air Force Outdoor Recreation Programs, BAFB must maintain a properly sized and functioning outdoor recreation facility. This facility would include equipment rental and non-appropriated funds (NAF) central storage, which is needed at BAFB to allow military personnel to take advantage of the many outdoor recreation opportunities available in Colorado. Outdoor recreation activities such as biking, hiking, trail running, backpacking, skiing and others are rapidly becoming the most popular way for military personnel and their families to maintain a high level of fitness and cardiovascular health, which can meet portions of the requirements of AFI 40-501, Air Force Fitness Program. Currently outdoor recreation equipment rental services are located in multiple temporary facilities on BAFB with no central customer service point. This makes it difficult for military personnel, their dependents, and retirees to find the equipment they would like to loan or rent. Additionally, the current lack of storage space for rental recreation equipment places severe limits on the types of equipment that can be made available to military personnel, their dependents, and retirees. Alternatives considered for this proposed action include (1) the no action alternative, (2) the construction and operation of an outdoor recreation equipment rental facility adjacent to Building 1005 (Alternative 1), (3) adaptive reuse of an existing facility (Alternative 2), (4) locating the outdoor recreation equipment rental facility off-base (Alternative 3), (5) locating the outdoor recreation equipment rental facility near the Main Gate (Alternative 4), or (6) locating the outdoor recreation rental facility near Williams Lake (Alternative 5). This EA has been prepared in accordance with the National Environmental Policy Act to analyze the potential environmental consequences of constructing and operating an outdoor recreation facility at BAFB. Under the no action alternative, outdoor recreation leasing, rental, and teaching activities would continue at multiple locations on BAFB. The environmental resources potentially affected by the proposed action and alternatives include surface water resources and stormwater quality; air quality; biological resources including vegetation, wildlife, and threatened and/or endangered species; noise; social or economic resources, including environmental justice; land use and transportation; public utilities, including wastewater; and hazardous materials and substances. The following resource/issue areas were eliminated from detailed analysis in this EA based on absence of the resource/issue at or adjacent to the project area or design or engineering techniques that avoided impacts from the resource/issue: groundwater resources; wetlands; soils

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COVER SHEET
ENVIRONMENTAL ASSESSMENT
FOR THE PROPOSED CONSTRUCTION AND OPERATION OF AN OUTDOOR
RECREATION EQUIPMENT RENTAL FACILITY AT BUCKLEY AIR FORCE BASE,
COLORADO

Prepared by
Headquarters Air Force Center for Environmental Excellence
Brooks Air Force Base, Texas 78235-5122

- a. **Responsible Agency:** U.S. Air Force, 460th Air Base Wing
- b. **Proposed Action:** Construct and operate an outdoor recreation equipment rental facility, at Buckley Air Force Base (BAFB), Colorado.
- c. **Written comments and inquiries regarding this document should be directed to:** Elise Sherva, 460 CES/CEVP, 660 S. Aspen Street (Stop 86), Bldg. 1005, Room 254, Buckley AFB, Colorado 80011-9551; telephone (303) 677-9077; e-mail elise.sherva@buckley.af.mil.
- d. **Privacy Advisory:** Your comments on this Draft Environmental Assessment (EA) are requested. Letters or other written or oral comments provided may be published in the Final EA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment portion of any public meeting or hearings or to fulfill requests for copies of the Final EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the name of individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.
- e. **Designation:** Environmental Assessment (EA)
- f. **Abstract:** In order to meet the requirements of Air Force Instruction (AFI) 34-262, *Service Programs and Use and Eligibility*, and AFI 34-110, *Air Force Outdoor Recreation Programs*, BAFB must maintain a properly sized and functioning outdoor recreation facility. This facility would include equipment rental and non-appropriated funds (NAF) central storage, which is needed at BAFB to allow military personnel to take advantage of the many outdoor recreation opportunities available in Colorado. Outdoor recreation activities such as biking, hiking, trail running, backpacking, skiing, and others are rapidly becoming the most popular way for military personnel and their families to maintain a high level of fitness and cardiovascular health, which can meet portions of the requirements of AFI 40-501, *Air Force Fitness Program*. Currently, outdoor recreation equipment rental services are located in multiple temporary facilities on BAFB with no central customer service point. This makes it difficult for military personnel, their dependents, and retirees to find the equipment they would like to loan or rent. Additionally, the current lack of storage space for rental recreation equipment places severe limits on the types of equipment that can be made available to military

personnel, their dependents, and retirees. Alternatives considered for this proposed action include (1) the no action alternative, (2) the construction and operation of an outdoor recreation equipment rental facility adjacent to Building 1005 (Alternative 1), (3) adaptive reuse of an existing facility (Alternative 2), (4) locating the outdoor recreation equipment rental facility off-base (Alternative 3), (5) locating the outdoor recreation equipment rental facility near the Main Gate (Alternative 4), or (6) locating the outdoor recreation rental facility near Williams Lake (Alternative 5).

This EA has been prepared in accordance with the National Environmental Policy Act to analyze the potential environmental consequences of constructing and operating an outdoor recreation facility at BAFB. Under the no action alternative, outdoor recreation leasing, rental, and teaching activities would continue at multiple locations on BAFB.

The environmental resources potentially affected by the proposed action and alternatives include surface water resources and stormwater quality; air quality; biological resources, including vegetation, wildlife, and threatened and/or endangered species; noise; social or economic resources, including environmental justice; land use and transportation; public utilities, including wastewater; and hazardous materials and substances. The following resource/issue areas were eliminated from detailed analysis in this EA based on absence of the resource/issue at or adjacent to the project area or design or engineering techniques that avoided impacts from the resource/issue: groundwater resources; wetlands; soils; historic or archeological resources; the Environmental Restoration Program; and radon. Based on the nature of the activities that would occur during the construction and operation of an outdoor recreation facility, the U.S. Air Force has determined that minimal or no adverse impacts to the above resources are anticipated.

g. **Comments must be received by: 30 March 2004**

**FINDING OF NO SIGNIFICANT IMPACT FOR THE
PROPOSED CONSTRUCTION AND OPERATION OF AN OUTDOOR RECREATION EQUIPMENT
RENTAL FACILITY AT BUCKLEY AIR FORCE BASE, COLORADO**

Agency

U.S. Air Force, 460th ~~Air Base Wing~~ *State Wing*

Background

The attached environmental assessment (EA), dated August 2004, analyzes the potential for impacts to the environment as a result of construction and operation of an outdoor recreation equipment rental facility at Buckley Air Force Base (BAFB), Colorado. This EA was prepared in accordance to 32 Code of Federal Regulations (CFR) §989, which, in turn, implements Section 102 (2) of the National Environmental Policy Act (NEPA) and the regulations established by the Council on Environmental Quality (CEQ).

Proposed Action

The proposed action and alternatives included (1) construction and operation of an outdoor recreation equipment rental facility located between Buildings 806 and 1005 (Proposed Action); (2) construction and operation of an outdoor recreation equipment rental facility adjacent to Building 1005 (Alternative 1); (3) adaptive reuse of an existing facility (Alternative 2); (4) locating the outdoor recreation equipment rental facility off-base (Alternative 3); (5) locating the outdoor recreation equipment rental facility near the Main Gate (Alternative 4); (6) locating the outdoor recreation equipment rental facility near Williams Lake (Alternative 5); and (7) the no action alternative.

Factors Considered in Determining That No Environmental Impact Statement is Required

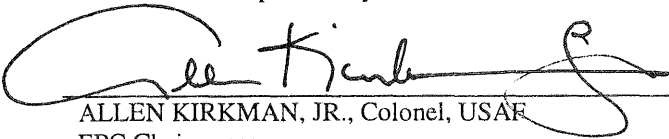
The EA, which is incorporated by reference, analyzed the environmental impacts of implementing the Proposed Action and the No Action Alternative taking into account all relevant environmental resource areas and conditions. The following resources were eliminated from detailed analysis in this EA due to the absence of these resources at or adjacent to the project area or accepted engineering or design techniques, which would ensure no significant impacts: groundwater resources, wetlands, soils, historic or archeological resources, the Environmental Restoration Program, and radon. The U.S. Air Force has examined the following resource areas and found that implementing the proposed action, or the no action alternative, would not result in any significant impacts: surface water resources, stormwater, and 100-year floodplain; air quality; biological resources, including vegetation, wildlife, and threatened and/or endangered species; noise; social or economic resources, including environmental justice; land use and transportation; public utilities, including wastewater; and hazardous materials and substances.

Public Notice

NEPA, 40 CFR §1500-1508, and 32 CFR §989 require public review of the EA before approval of the Finding of No Significant Impact (FONSI) and implementation of the Proposed Action. The public review period ended on 29 March 2004.

Finding of No Significant Impact

Based on the requirements of NEPA, 40 CFR §1500-1508, and 32 CFR §989, I conclude that the environmental effects of implementing the proposed action or alternatives are not significant, and therefore, an environmental impact statement will not be prepared. A notice of availability for public review was published in the Denver Post on 29 February 2004 indicating a 30-day review period. A hard copy of the Draft EA with a Draft FONSI was placed in the Denver and Aurora public libraries for dissemination. The signing of this FONSI completes the USAF Environmental Impact Analysis Process.


ALLEN KIRKMAN, JR., Colonel, USAF
EPC Chairperson

21 SEPTEMBER 2004

Date

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SECTION 1.0 PURPOSE OF AND NEED FOR THE ACTION

This environmental assessment (EA) was prepared in accordance with the U.S. Air Force (USAF) Environmental Impact Analysis Process (EIAP) (32 Code of Federal Regulations [CFR] Part 989). The EIAP complies with the regulations promulgated by the Council on Environmental Quality (CEQ) (40 CFR Part 1500-1508), which, in turn, implements Section 102 (2) of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] §4321 to §4370d). The principal objectives of NEPA are to ensure the careful consideration of environmental aspects of proposed actions in federal decision-making processes and to make environmental information available to decision-makers and the public, before decisions are made and actions are taken. This EA has been prepared by the USAF to satisfy the EIAP, which requires the assessment of environmental effects resulting from the proposed construction and operation of an outdoor recreation equipment rental facility at Buckley Air Force Base (BAFB). Resource or issue areas analyzed in detail within this EA include: surface water resources and stormwater quality; air quality; biological resources, including protected species; noise; social or economic resources, including environmental justice; land use and transportation; public utilities; and hazardous materials and substances. According to CEQ guidance the following resource or issue area were eliminated from detailed analysis in this EA based on absence of the resource/issue at or adjacent to the project area or appropriate engineering and design techniques that would avoid impacts to/from the resource/issue: groundwater resources; wetlands; soils; historic or archeological resources; the Environmental Restoration Program (ERP); and radon.

1.1 INTRODUCTION AND BACKGROUND

BAFB lies within the Denver metropolitan area and encompasses approximately 3,283 acres adjacent to the City of Aurora, Arapahoe County, Colorado (Figure 1-1). The 460th Air Base Wing (460 ABW) is the current host of BAFB. The mission of the 460th Air Base Wing is to provide combat capability through superior services to air and space, DoD missions and expeditionary forces. The current population of BAFB includes 3,600 active duty personnel, approximately 3,600 civilian employees, approximately 1,750 contract employees, approximately 22,000 retirees, and approximately 55,000 dependents and veterans. The tenant units at BAFB are listed in Table 1-1; however, this list is not inclusive since units tend to change periodically.

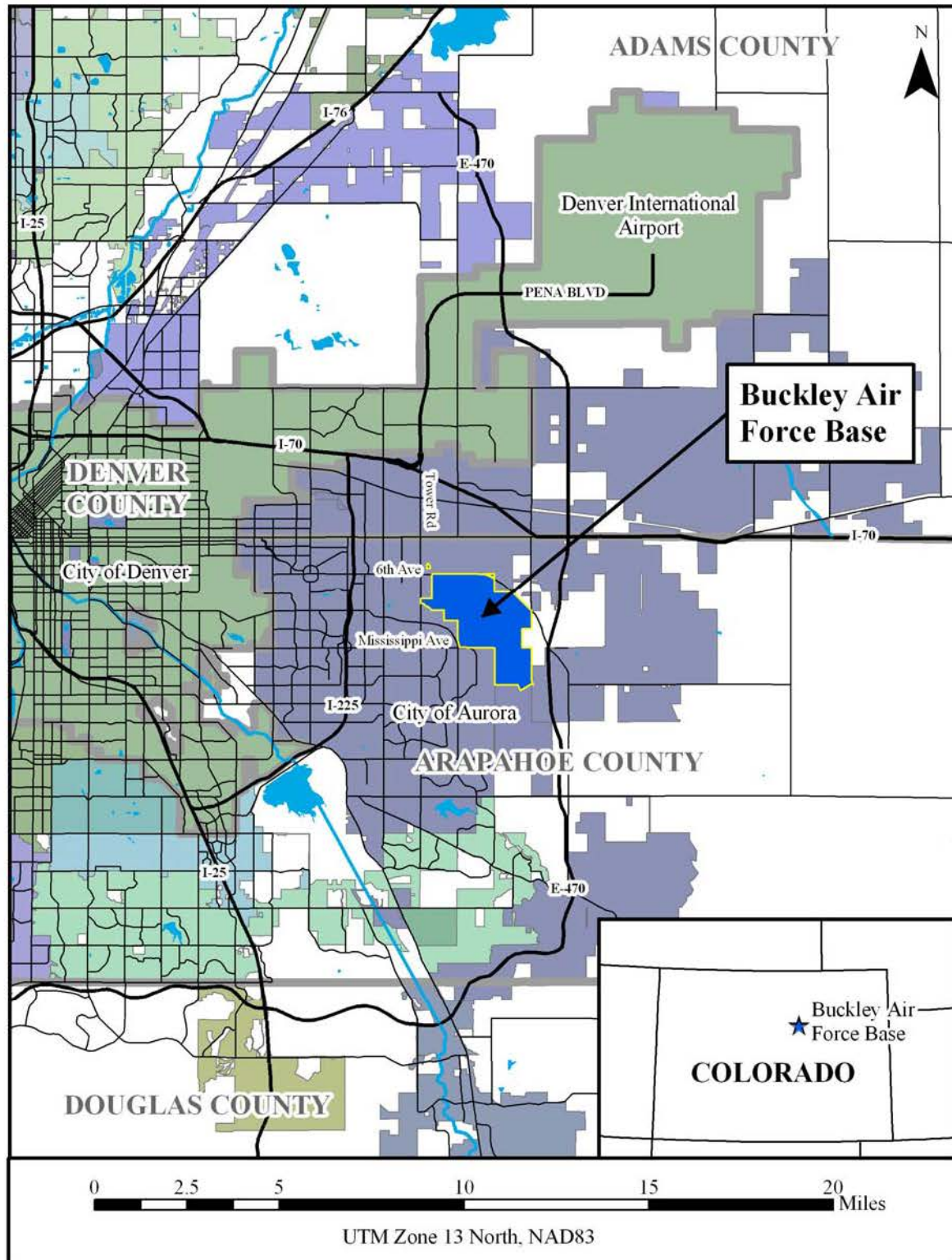


Figure 1-1. General Location of BAFB

**Table 1-1
Tenant Units at BAFB**

<ul style="list-style-type: none"> • 1st Battalion, 89th Troop Command (Army) • 2nd Space Warning Squadron • 8th Space Warning Squadron • 120th Fighter Squadron • 140th Wing, COANG • 240th Civil Engineering Flight • 169th Field Artillery Brigade, COARNG 	<ul style="list-style-type: none"> • 743rd Military Intelligence Battalion • Aerospace Data Facility • Air Force Accounting and Finance Office • Army/Air Force Exchange Service • Battery A, 1st Battalion, 14th Marines • Company A, Marine Support Battalion • COARNG • Civil Air Patrol Combined Task 	<ul style="list-style-type: none"> • Defense Commissary Agency • Defense Contract Manager • Department of Military Affairs • Detachment 4, Air Force Operational Testing and Evaluations Center • Detachment 801, Air Force Office of Special Investigations • Detachment 45, Air Force Technical Applications Center 	<ul style="list-style-type: none"> • Navy and Marine Corps Reserve Centers, Naval Air Reserve Center, Denver • U.S. Property and Fiscal Office for Colorado • U.S. Army Corps of Engineers • U.S. Military Entrance Processing Command
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COANG = Colorado Air National Guard
COARNG = Colorado Army National Guard
Source: 460 ABW Directory, 15 January 2003

1.2 PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS AT BUCKLEY AIR FORCE BASE

Approximately 50 activities/facilities have been identified as needed for successful operation of BAFB and to improve the quality of life for active, reserve, and retired members of the armed services living in the Denver area. The BAFB General Plan lists more than 2.8 million square feet (SF) of facilities/areas proposed for construction between Fiscal Year 2002 (FY 02) to FY 13 (BAFB 2002b). Since FY 02, construction has been completed on a new base exchange/commissary, a space-based infrared surveillance (SBIRS) antenna, a fitness center, and the Telluride Gate, and Building 25 has been demolished for a net increase of approximately 217,000 SF. Over the next four year (FY 04-FY 08) approximately 1.6 million SF of new facilities construction is planned and approximately 85,000 SF is scheduled to be demolished; however, time lines are subject to change and projects may be constructed at earlier or later dates. The proposed outdoor recreation equipment rental facility, including outdoor storage areas, would require approximately 15,300 SF, 50 surface parking spaces, and 6 recreational vehicle (RV) surface parking spaces. Other planned construction activities on BAFB are listed in Table 1-2. Currently, BAFB has 176 buildings with approximately 2.5 million gross SF of occupiable floor space and approximately 2.0 million SF of parking (BAFB 2002b).

Table 1-2
Scheduled Facility Projects at BAFB

<p>FY 02</p> <ul style="list-style-type: none"> Physical Fitness Center (completed) 2nd Dormitory (144) (under construction) Military Family Housing¹ Telluride/6th Avenue Entry Gate (completed) 	<p>FY 05 (cont'd)</p> <ul style="list-style-type: none"> Athletic Fields Outdoor Recreation Equipment Rental Facility (NAF) ADAL Medical Clinic Hazardous Waste Storage Facility Hazardous Materials Issue Facility Army Aviation Support Facility (COARNG) Permanent Alert Shelters & Crew Quarters (COANG)
<p>FY 03</p> <ul style="list-style-type: none"> 460 ABW Headquarters ADAL SBIRS Mission Control (under construction) Visitors' Quarters Temporary Lodging Facility (NAF) Car Wash (AAFES) Control Tower (COANG) Fire Station Addition Engine Shop Addition, Building 960 (COANG) Repair Runway, Taxiways, Ramps (COANG) Williams Lake Pavilions (2) Entomology H-70 Fuel Storage Facility Golf Driving Range (NAF) Addition to Child Development Center Civil Engineering Warehouse 	<p>FY 06</p> <ul style="list-style-type: none"> Medical Pharmacy Leadership Development Center Consolidated Fuels, including Military Gas Station Logistics Complex Consolidated Services Facility Security Forces Operations Facility Youth Center (NAF) Ball Field Concession (NAF) Outdoor Arms Range
<p>FY 04</p> <ul style="list-style-type: none"> Upgrade BAFB Infrastructure, Phase III Air National Guard Civil Engineering Complex Approach Lighting (COANG) Repair COANG Parking Lots (COANG) Repair Parking Lot East of Building 471 ADAL Airfield Access Roads (COANG) Fire Training Facility Impound Lot East Gate Visitor Center 	<p>FY 07</p> <ul style="list-style-type: none"> Education Center ADAL Communications Center, Building 730 Vehicle Maintenance Facility
<p>FY 05</p> <ul style="list-style-type: none"> Vail Street Improvements Repair Taxiways A & K Chapel Center Child Development Center Playgrounds 	<p>FY 08</p> <ul style="list-style-type: none"> Widen 6th Avenue Consolidated Base Warehouse Entry Control Facility Aerospace Data Facility Addition <p>FY 09</p> <ul style="list-style-type: none"> Upgrade Infrastructure – Phase IV Fitness Center Addition Fire Station Addition New Parking Apron Taxiway and Arm/Disarm (COANG) Weapons Loading Facility (COANG) Weapons Release Complex (COANG)

¹ These projects were carried into FY 03.

AAFES = Army/Air Force Exchange Service

ADAL = Addition/Alteration

COANG = Colorado Air National Guard

COARNG = Colorado Army National Guard

NAF = nonappropriated funds

Source: 1st Quarter BAFB Facilities Board, 31 January 2004

1.3 PURPOSE AND NEED

In order to meet the requirements of Air Force Instruction (AFI) 34-262, *Service Programs and Use and Eligibility*, and AFI 34-110, *Air Force Outdoor Recreation Programs*, BAFB must maintain a properly sized and functioning outdoor recreation equipment rental facility. This facility would include equipment rental and non-appropriated funds (NAF) central storage, which is needed at BAFB to allow military personnel to take advantage of the many outdoor recreation opportunities available in Colorado. As stated in AFI 34-262, "Service programs are vital to mission accomplishment and form an integral part of the non-pay compensation system. These programs provide a sense of community among patrons and provide support services...They provide for the physical, cultural, and social needs and general well-being of military members and their families...." Outdoor recreation activities such as biking, hiking, trail running, backpacking, skiing, and others are rapidly becoming the most popular way for military personnel and their families to maintain a high level of fitness and cardiovascular health which can meet portions of the requirements of AFI 40-501, *Air Force Fitness Program*. Outdoor recreation activities are listed as Category B service activities, which are community support activities and can be funded with up to 50 percent NAF. Currently, outdoor recreation equipment rental services are located in multiple temporary facilities on BAFB with no central customer service point (Figure 1-2). This makes it difficult for military personnel, their dependents, and retirees to find the equipment they would like to loan or rent. Additionally, the current lack of storage space for rental recreation equipment severely limits the types of equipment that can be made available to military personnel, their dependents, and retirees.

1.4 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

This EA addresses the potential impacts to surface water resources, stormwater, and 100-year floodplains; air quality; groundwater resources; wetlands; soils; biological resources, including vegetation, wildlife, and threatened and/or endangered species; noise; social or economic resources, including environmental justice; historic or archeological resources; land use and transportation; public utilities, including wastewater; Environmental Restoration Program (ERP); radon; and hazardous materials and substances. The applicable regulatory requirements for each of the resource areas are also identified, as well as the existing conditions of each resource area on the installation.

The NEPA and CEQ regulations require that the environmental effects of proposed actions and alternatives be considered in the decision-making process. Preparation of an environmental document (this EA) must precede final decisions regarding the proposed action, and the document must be available to inform decision-makers and the public of potential environmental consequences/impacts. The development of this EA allows for public consideration and input concerning the implementation of the proposed

SECTION 1.0
PURPOSE OF AND NEED FOR THE ACTION

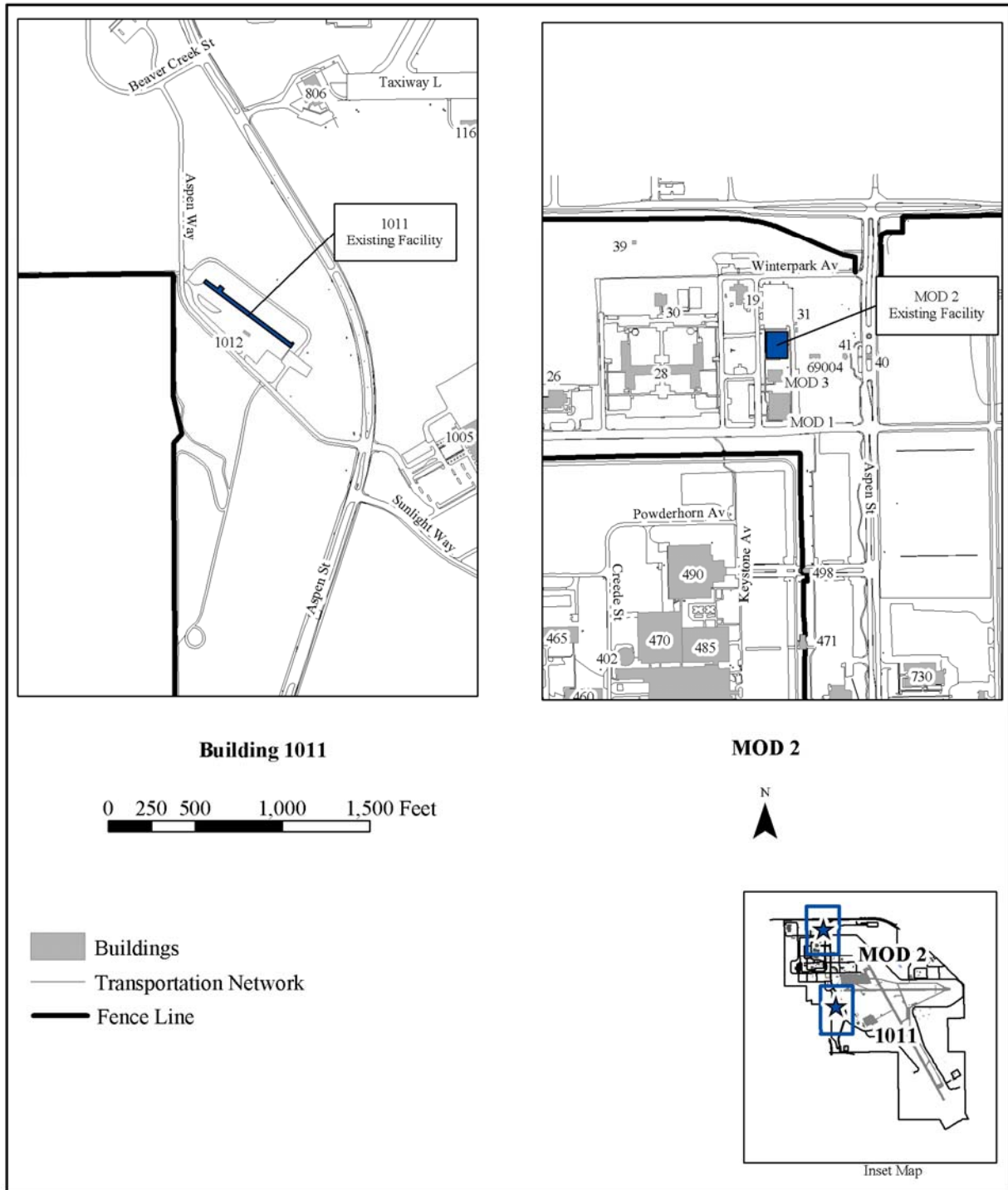


Figure 1-2. Location of Current Outdoor Recreation Equipment Rental Facilities

construction and operation of an outdoor recreation equipment rental facility. This EA provides the decision-makers and the public with the information required to understand the possible future environmental consequences/impacts of implementing the proposed action or alternatives. The decision to be made, after a review of the analysis presented in this EA, would be whether to issue a finding of no significant impact (FONSI) or to proceed with the implementation of an environmental impact statement (EIS) to further quantify and detail the potentially significant impacts resulting from implementation of the proposed action or alternatives. While this EA provides information with which to make better decisions about proposed actions, it does not imply project approval or authorization, which is obtained through the 460 ABW Facilities Board.

1.5 ORGANIZATION OF THE ENVIRONMENTAL ASSESSMENT

This document follows the format established in 32 CFR §989 implementing the CEQ regulations (40 CFR §1502). The document consists of the following sections:

Section 1.0 – Purpose of and Need for the Action: presents a brief description of the background of the installation; the past, present, and reasonably foreseeable future actions on BAFB; the purpose and need for the proposed action; the scope of the environmental review; and a brief description of the EA organization.

Section 2.0 – Alternatives Including the Proposed Action: provides a detailed description of the selection criteria and descriptions of the proposed action and alternatives. Section 2.0 also contains an alternatives comparison matrix.

Section 3.0 – Affected Environment: presents the existing baseline environment or present condition of the area(s) potentially affected by the alternatives identified to implement the proposed action. Each environmental resource potentially impacted by the implementation of the proposed action and alternatives is discussed for each impacted resource area.

Section 4.0 – Environmental Consequences: provides the scientific and/or analytical basis for comparing the alternatives and describes the probable consequences of each alternative on relevant environmental attributes.

Section 5.0 – List of Preparers: provides a list of the document preparers and contributors.

Section 6.0 – Distribution List and Agencies and Individuals Contacted: provides a list of persons/agencies contacted in the preparation of this EA.

Section 7.0 – References: provides a list of references used in the preparation, though not necessarily cited, within the text of this EA.

Section 8.0 – Acronyms and Abbreviations: provides a list of applicable acronyms and abbreviations used throughout the text.

Appendices – provide background and supporting information to this EA, as necessary. Appendices included in this EA are Appendix A: USAF Form 813; Appendix B: Representative Photographs; Appendix C: Notice of Availability and Affidavit of Publication; Appendix D: Interagency Coordination Letters; and Appendix E: Comments and Response to Comments.

SECTION 2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section of the EA describes the proposed action and the alternatives developed by BAFB. This section also describes the process used to objectively identify the reasonable alternatives carried forward for detailed environmental analysis, as well as the reasoning for elimination of alternatives. A comparative summary of the proposed action, alternatives, and how they do or do not meet the selection criteria identified in Section 2.1 is also included.

2.1 IDENTIFICATION OF SELECTION CRITERIA

In an effort to satisfy the purpose and need for the proposed action, several selection criteria were developed to compare and contrast alternative ways of fulfilling the objectives of the proposed action in accordance with 32 CFR §989.8(c). Those specific criteria include:

1. **Centralize all outdoor recreation loan/rental activities on the base.** In order to more efficiently serve military personnel, their dependents, and retirees and increase awareness of recreational opportunities and available equipment, BAFB would like to centralize all outdoor recreation loan/rental activities into one customer service point. This would increase the self-service atmosphere, which encourages browsing and undertaking new activities, a described goal in AFI 34-110.
2. **Locate the facility in an easily accessible area near a main thoroughfare of BAFB.** In order to be an attractive option for outdoor recreation equipment loan/rental, the location chosen should be easily accessed from main thoroughfares on BAFB. Access to the facility via a main thoroughfare would encourage facility use by retirees and military personnel and their dependents not living on base. High visibility of the facility near a main thoroughfare would encourage “drop-in” visits by the customer base traveling on the thoroughfare for other purposes.
3. **Locate the facility in a compatible land use area.** To increase visibility of the outdoor recreation equipment rental facility, it should be located in a compatible land use area near areas of high use by military personnel, their dependents, and retirees. Compatible areas would be commercial, retail, services, office/administrative, and industrial. Additionally, the area should be developed or adjacent to a developed area to minimize costs associated with utility placement.

4. **Locate the facility in an area that does not conflict with other planned uses or projects.** Due to the amount of development currently occurring and planned to occur on BAFB, the outdoor recreation equipment rental facility should be located in an area that would not conflict with other planned uses or projects.

2.2 DESCRIPTION OF THE PROPOSED ACTION

Under the proposed action, BAFB would construct, equip, and operate an outdoor recreation equipment rental facility that loans, rents, and sells outdoor recreation equipment, as well as provides instruction and planned activities for various outdoor recreation opportunities available to military personnel, their dependents, and retirees. The proposed facility would be constructed on the undeveloped area east of Aspen Street between the BAFB Fire Station (Building 806) and the Civil Engineering (CE) Complex (Building 1005) in an area planned for commercial/industrial uses (Figure 2-1). This facility would contain approximately 9,300 SF within the main building, 1,000 SF in covered storage, 5,000 SF in outdoor storage, 6 RV parking spaces, 10 staff parking spaces, and 40 customer parking spaces. Additionally, a curbed vehicle entrance would be constructed for access from Aspen Street. The outdoor storage areas would be maintained gravel. Additional surfacing materials, such as asphalt and concrete, were considered and were eliminated due to cost in comparison with gravel surfacing. The proposed action would meet the selection criteria detailed previously. More specifically, this action:

1. Would centralize all outdoor recreation loan/rental activities into one location.
2. Would be located in an area easily accessible from the major thoroughfares on BAFB.
3. Would be located in a compatible land use area. An industrial/commercial location would be best suited for the outdoor recreation equipment rental facility due to the small RV campers that would be stored on site. Additionally, this land use type would allow for a RV dump station and a large wash pad.
4. Would locate the project in an area that does not conflict with other planned uses or projects.

2.2.1 Construction and Demolition Activities

Due to the high occurrence of montmorillonite/bentonite in soils within the eastern portion of Colorado, a geotechnical analysis of the potential for expansive soils at the proposed site would be conducted, prior to construction activities. This analysis would assess the potential capacity for clays adjacent to and at the site to shrink and swell during differential moisture regimes. If the analysis indicated the presence of highly

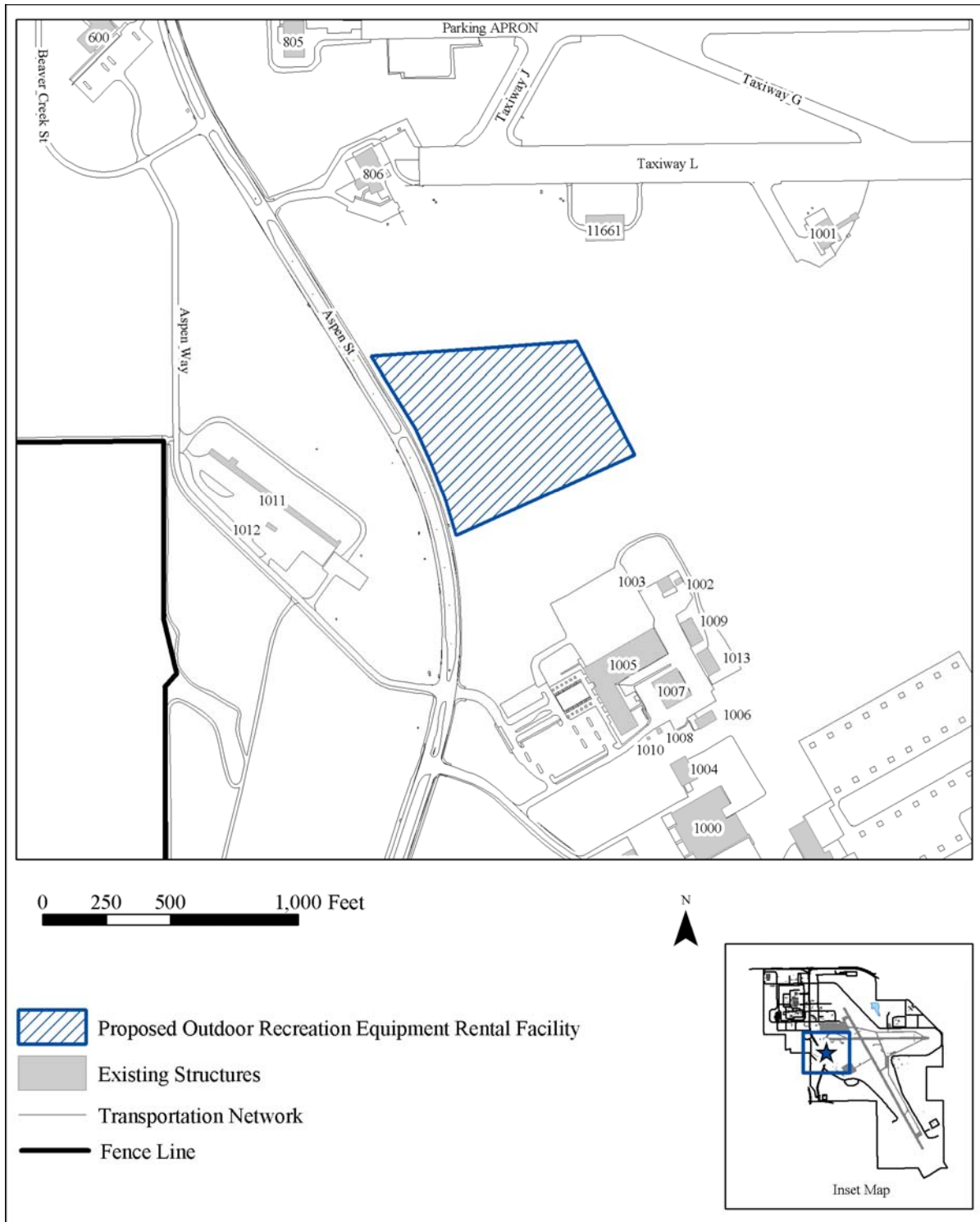


Figure 2-1. Proposed Location of the Outdoor Recreation Equipment Rental Facility

SECTION 2.0
ALTERNATIVES INCLUDING THE PROPOSED ACTION

expansive soils, proper engineering techniques would be utilized to stabilize the soils prior to construction of any concrete pad sites.

Construction activities are scheduled to begin in FY 05 or FY 06 and are anticipated to last approximately 18 months; however, the time line is subject to change, and the project may be constructed at an earlier or later date or in different years. On-site construction equipment would include the use of heavy trucks or the equivalent. Additional light-duty equipment (e.g., generators, compressors) would also be utilized throughout the duration of activities. All equipment would likely come from local sources and would be brought to the site via local roadways. Equipment maintenance would be conducted off site by the contractor and in accordance with all applicable laws and regulations. Construction activities would typically occur 8 hours per day, 6 days per week; however, the hours/days are subject to change and the project may be constructed at earlier or later times or on different days.

A majority of the construction materials would likely come from local sources and would be stored at the site for the duration of activities. All construction materials purchased for this project shall be compliant with affirmative procurement requirements. This requires that all materials be purchased with the highest recyclable content possible to perform the job. No grading plan is currently available; however, preliminary plans indicate that cut-and-fill materials would be balanced so that no new soils would be brought on site or existing soils removed. All construction debris would be recycled or disposed of at an approved landfill in accordance with all applicable federal, state, and local laws and regulations. Though not anticipated, any potentially hazardous materials or wastes would be handled and disposed of in accordance with all applicable federal, state, and local regulations.

To reduce impacts to local and regional air quality, abatement measures, such as proper maintenance of construction vehicles to reduce combustive emissions, limiting the size of the disturbance area, and watering exposed soils at the beginning and end of daily construction activities, would be implemented to minimize or prevent fugitive dust emissions. BAFB is developing and would maintain in place stormwater construction permitting and best management practices (BMPs) to avoid or minimize potential impacts from stormwater runoff. In addition to BMPs, additional observations and maintenance would be undertaken when performing scheduled servicing of the catch basins and any other stormwater collection points. This would ensure containment of construction debris, displaced silt, and fuel, oil, grease, and coolants from construction equipment, thereby reducing nonpoint sources of pollutants in stormwater flows. The stormwater system would be upgraded, as necessary, to support the proposed action. Black-tailed prairie dogs (*Cynomys ludovicianus*) and burrowing owls (*Athene cunicularia*) would be managed, in accordance with the Supplemental EA of the Proposed Prairie Dog Management Practices at BAFB, dated June 2001.

2.2.2 Permits and Notifications

In accordance with the National Pollutant Discharge Elimination System (NPDES) requirements (construction sites greater than 5 acres [Phase I] and between 1 and 5 acres [Phase II]), a site-specific stormwater pollution prevention plan (SWPPP) would be developed and implemented for construction activities. The SWPPP would be maintained on site and would provide measures to eliminate or reduce any potential impacts to surface water quality near the project site (i.e., implementation of BMPs). Prior to the start of construction activities, a notice of intent (NOI) would be filed with the U.S. Environmental Protection Agency (USEPA) in accordance with the USEPA Stormwater Construction General Permit. No construction activities would proceed until the NOI has been posted on the USEPA website for seven days.

An NOI, in accordance with BAFB's industrial pretreatment permit, would be filed with the Metro Wastewater Reclamation District at least one working day before the discharge of chlorinated water discharge from the new outdoor recreation equipment rental facility into the sanitary sewer system. Chlorinated discharge would be used to disinfect the potable water system of the outdoor recreation equipment rental facility prior to permanent occupation. The chlorinated water would remain within the new facility's potable water system for approximately 24 hours before being discharged. The amount of chlorinated water used for disinfection would be determined prior to acquiring the NOI. The chlorinated water would be discharged to the sanitary sewer or captured, dechlorinated (per the American Water Works guidelines), and used for irrigation, if practicable.

Due to the operating requirements of the facility, the RV dump station would need to be added to BAFB's Slug Loading and Control Plan, which would require approval of the Metro Wastewater Reclamation District.

2.2.3 Operational Activities

The outdoor recreation equipment rental facility would be open during normal base operating hours. The facility would contain outdoor recreation equipment rental/retail display, a NAF resale, counter sales, ski storage/maintenance, general maintenance, and storage areas. All outdoor storage areas would be fenced using standard chain-link mesh per safety requirements. The facility would include a classroom for instructional classes, trip planning, and briefing.

Outdoor areas associated with the facility include a wash pad, a small flammable materials storage locker containing no more than one gallon containers of gasoline, and a dump station for RV wastewater. Water from the wash pad would be routed into the sanitary sewer system for treatment. The wash pad would contain run-on controls, such as curbing to minimize untreated flows into the storm sewer system. The final design of

the wash pad would contain a roof or diversion valves to keep stormwater out of the sanitary sewer system. The storage locker would be located in an area containing secondary containment measures. If unexpected spills occur in the outdoor storage area or RV parking area, spill containment measures would be implemented, which would include stopping the spill, cleaning any contaminated surfaces, and removing any contaminated materials. BMPs would be implemented to minimize any incidental contaminants from reaching the storm sewer system or surface water areas.

Prior to any dump station activities, the RV dump station would be included in the BAFB Slug Loading and Control Plan. The Metro Wastewater Reclamation District would be notified prior to any discharge of materials from the dump station.

2.3 ALTERNATIVES TO THE PROPOSED ACTION

BAFB's General Plan (2002) established a comprehensive and systematic development plan for the base through the calendar year 2020. This General Plan won an architectural and planning award from the USAF. The siting of all construction projects under this EA are compatible with the General Plan. For this reason alternate, sitings for these projects are not considered as alternate actions in this EA.

2.3.1 No Action Alternative

The no action alternative does not satisfy the purpose and need for the proposed action; however, pursuant to NEPA, the no action alternative has been carried forward as the baseline to which potential impacts of the action alternative can be measured. Under the no action alternative, outdoor recreation loan/rental facilities would be maintained in multiple locations on BAFB. This maintains the current facility deficiencies, the inability to provide adequate programming, and further logistical problems. The military population would be forced to leave BAFB to find adequate outdoor recreation and equipment rental programs. This would result in continued low utilization of on-base resources, which would further damage the viability of the BAFB outdoor recreation program.

2.3.2 Alternative 1 – Outdoor Recreation Equipment Rental Facility Adjacent to Building 1005

Under this alternative, an approximately 11,000-SF outdoor recreation equipment rental facility would be constructed east of Aspen Street adjacent to Building 1005. This location would not be considered as easily accessible to the major thoroughfare on BAFB as a facility fronting Aspen Street. Additionally, the facility would be located next to the less desirable land uses and farther away from military family housing areas. The location adjacent to Building 1005 would require additional roadway construction to connect the facility to Aspen Street. This location is also currently planned to undergo

development as a Logistics Facility, thereby development of the outdoor recreation equipment rental facility would conflict with these planned uses and projects. As such, this alternative has been eliminated from further study within the EA.

2.3.3 Alternative 2 – Adaptive Reuse of an Existing Facility

Under this alternative, the outdoor recreation equipment rental facility would be located in an adaptively reused space on BAFB. Currently, there are no structures on BAFB that could be adaptively reused for this function. As such, this alternative has been eliminated from further study within this EA.

2.3.4 Alternative 3 – Locating the Outdoor Recreation Equipment Rental Facility Off Base

Under this alternative, BAFB would lease space off base for the outdoor recreation equipment rental facility. This alternative was eliminated from further study in this EA due to the inconvenience for on-base personnel and their dependents. In addition, leased space would require additional security improvements, which could make this alternative economically cost-ineffective to meet the Department of Defense (DOD) and USAF security standards.

2.3.5 Alternative 4 – Locating the Outdoor Recreation Equipment Facility near the Main Gate

Under this alternative, BAFB would construct the new outdoor recreation equipment rental facility at one of several locations near the Main Gate. However, due to the high visibility areas, incompatible land uses, and potential asbestos contamination, these locations were eliminated from further detailed study in this EA.

2.3.6 Alternative 5 – Locating the Outdoor Recreation Equipment Facility near Williams Lake

Under this alternative, BAFB would construct the new outdoor recreation equipment rental facility near an undeveloped area near Williams Lake. This location was eliminated from further study in this EA due to incompatible land uses, including not being adjacent to current utilities; inconvenience to base personnel, their dependents, and retirees to reach the location given the limited roadways; and the potential adverse impacts to sensitive environmental areas located near Williams Lake (i.e., wetlands or protected species).

2.4 COMPARISON OF THE ALTERNATIVES

Table 2-1 provides a summary comparison of the alternatives as they relate to the purpose and need criteria presented in Section 2.1. This table indicates that the proposed action would meet the established purpose and need. Table 2-2 provides a summary of the environmental consequences to those resources analyzed in detail within this EA associated with implementing those alternatives carried forward for detailed analysis. As demonstrated in Table 2-2, none of the alternatives carried forward for detailed analysis should result in significant impacts to the environment based on set significance thresholds.

Table 2-1
Summary Comparison of Proposed Action and Alternatives

Purpose and Need Criteria	Alternatives						
	Proposed Action	No Action	1	2	3	4	5
Centralize all outdoor recreation loan/rental activities	YES	NO	YES	NO	YES	YES	YES
Locate the facility in an easily accessible area near a main thoroughfare of BAFB	YES	NO	YES	NO	NO	YES	NO
Locate the facility in a compatible land use area	YES	NO	YES	NO	YES	NO	NO
Locate the facility in an area that does not conflict with other planned uses or projects	YES	NO	NO	NO	YES	NO	NO

Table 2-2
Alternatives Comparison Matrix Summary -
Resources Analyzed in Detail within This EA

Environmental Attributes (Threshold Criteria)	No Action	Proposed Action
Surface Water Resources and Stormwater <i>(number of surface water features affected)</i> <i>(change in physical or biological water quality parameters)</i> <i>(substantial increase in stormwater flow)</i> <i>(substantial alteration of localized drainage patterns)</i>	0 No No No	0 No No No
Air Quality <i>(increase above de minimis standards)</i>	No	No
Biological Resources <i>(acres of vegetation communities affected)</i> <i>(number of threatened and/or endangered species affected)</i>	0 0	0 0
Noise <i>(long-term increase above ambient noise conditions)</i>	No	No
Social or Economic Resources (Including Environmental Justice) <i>(unacceptable change in personal income or employment)</i> <i>(number of minority and/or low-income populations affected)</i>	No 0	No 0
Land Use and Transportation <i>(consistent with adjacent land uses [current and planned])</i> <i>(unacceptable change in level of service)</i>	Yes No	Yes No
Public Utilities <i>(unacceptable change in the level of service)</i>	No	No
Hazardous Materials and Substances <i>(existing solid/hazardous waste and debris removed)</i> <i>(number of federal and/or state database-listed sites affected)</i> <i>(ACM removed and remediated, if present)</i>	Yes 0 Yes	Yes 0 Yes

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SECTION 3.0 AFFECTED ENVIRONMENT

This section of the EA provides a description of the existing environment of the proposed project (see Figure 2-1). In accordance with CEQ regulations (§1502.20), this EA incorporates (where applicable) the description of the existing environment as previously described in the H-70 Fuel Storage/Medical Pharmacy EA, dated March 2003, by reference. Each resource area is defined within a limited region of influence (ROI). The ROI varies from resource area to resource area depending upon the scale of activities and the aspects that define each individual region. Environmental resources or attributes excluded from detailed analysis include groundwater resources, wetlands, soils, historic or archeological resources, the ERP, and radon.

3.1 RESOURCES ELIMINATED FROM DETAILED ANALYSIS IN THIS ENVIRONMENTAL ASSESSMENT

3.1.1 Groundwater Resources

The ROI for this resource would be the aquifers underlying BAFB. BAFB is underlain by aquifers of the Denver Basin aquifer system; specifically, the main underlying aquifers are the Denver aquifer and the Arapahoe aquifer (U.S. Geological Survey [USGS] 1995). The water-bearing layers of these two aquifers are approximately 150 to 175 feet thick (USGS 1995). BAFB has six non-tributary wells; BAFB receives potable water from the City of Aurora. Depth to groundwater is greater than 20 feet below ground surface; therefore, there are no potential impacts to this resource due to implementation of the proposed action or alternative. Since there would be no impacts to this resource, it has been eliminated from detailed analysis in this EA.

3.1.2 Wetlands

An analysis of the wetlands ROI includes only those wetlands or special aquatic sites located on the installation. A basewide jurisdictional wetlands determination by the U.S. Army Corps of Engineers (USACE) has not been made for BAFB; however, there are no potentially jurisdictional waters of the United States within or adjacent to the proposed site. The nearest potentially jurisdictional special aquatic site (e.g., potentially jurisdictional wetland) is approximately 500 feet west of the proposed site. Since there are no wetlands located within or adjacent to the proposed site, this resource has been eliminated from detailed analysis in this EA.

3.1.3 Soils

Due to geographic variability and historic land uses, the ROI for this resource area is confined to similar soil associations/types on the installation. The soil type listed as occurring at the proposed site is rock outcrop (U.S. Department of Agriculture [USDA] 1971). In the rock outcrops, soils have been stripped so that interbedded shale and sandstone are exposed at the surface. Shale is dominant; it varies in color and texture, is hard and platy, and resists water penetration. The sandstone is very hard and coarse grained. Soils adjacent to the proposed site are Fondis silt loam, 1 to 3 percent slopes. Fondis silt loam (1 to 3 percent slopes) soils occur on uplands (USDA 1971). The surface layer is approximately 7 inches thick and is abruptly delineated over the subsoil. The upper part of the subsoil is dense clay approximately 20 inches thick, and the lower portion is layers of yellowish-brown clay loam (USDA 1971). Depth to lime in this soil is approximately 14 to 20 inches (USDA 1971). The Fondis silt loams contain high-swelling clays and salts below a depth of 8 inches. These soil types are considered to have severe limitations for the foundations of small buildings and leaching fields. However, since the proposed site is limited to rock outcrops overlain by shallow surface soils, the amount of shrink-swell potential should be limited. Prior to any construction activities, geotechnical analysis of the soils would be undertaken to determine the presence of highly expansive soils. If these soils are identified, then proper engineering techniques would be utilized to stabilize the soils prior to construction activities. As such, this issue has been eliminated from further detailed study in this EA.

3.1.4 Historic or Archeological Resources

The area of potential effect for historic or archeological resources would be limited to the proposed site and immediately adjacent areas; however, there are no known archeological or historical resources on BAFB. A complete description of installation cultural resources and cultural resources management is provided in the Draft Final Integrated Cultural Resources Management Plan (Buckley Air National Guard Base [BANGB] 2000). Additionally, a historic building survey is currently being conducted on BAFB to identify and described historic properties on the base. Since BAFB does not contain any historic or archeological resources within or adjacent to the proposed site, this resource has been eliminated from further study in this EA.

3.1.5 Environmental Restoration Program

The ROI for this issue area would be the installation since this is a basewide program. The installation currently has an ERP to handle contaminated soil and groundwater sites. Two environmental database radius map searches covering the entire installation were performed for the H-70 Fuel Storage Facility/Medical Pharmacy EA dated March 2003, incorporated by reference. The proposed site is not located within a known ERP site or

adjacent to any known ERP sites. As such, the ERP has been eliminated from detailed analysis in this EA.

3.1.6 Radon

The ROI for this issue would be the existing radon levels within Arapahoe County and the potential levels at the proposed site. Arapahoe County is in USEPA Zone 1 for radon, which lists the average indoor radon level as greater than 4.0 pico-Curies per liter (pCi/l) (Environmental Data Resources, Inc. [EDR] 2002). Since radon levels within the proposed site could create a potential impact if the facility was occupied 8 hours a day or more, design features of the facility would be incorporated to eliminate any impacts from radon. Thus, this issue has been eliminated from further study in this EA.

3.2 SURFACE WATER RESOURCES AND STORMWATER QUALITY

Primary activities to control surface water use and quality are normally undertaken at the sub-watershed to watershed level, making water quality a primarily local concern. As such, the ROI for this resource area is limited to the sub-watershed containing the proposed site and adjacent areas.

3.2.1 Surface Water and Potentially Jurisdictional Waters

The South Platte River, located approximately 15 miles northwest of BAFB, is the primary surface water drainage in the region. Several smaller intermittent tributaries within or adjacent to BAFB feed this drainage system. Toll Gate Creek and an old tributary of Murphy Creek are the only named tributaries present on the installation. These waterways flow intermittently in the vicinity of, and on, BAFB. In general, drainage flows in a northwest direction. All drainage from the northern section of BAFB discharges into Murphy Creek and Sand Creek to the north and east of the base; drainage from the southern and western sections of the base discharges into Toll Gate Creek (BANGB 1999).

There are no surface water features within or adjacent to the project area. An unnamed tributary to Toll Gate Creek is approximately 1,000 feet north of the proposed recreation facility site and is the nearest surface water feature and potentially jurisdictional waterway. This waterway is fully supportive of agricultural and recreational activities and is not currently classified as threatened or impaired (Table 3-1).

3.2.2 Stormwater and Sanitary Sewer (Point Source Discharges)

The proposed site is located in an area where surface water runoff drains into BAFB's

**Table 3-1
Water Quality Status and Designation of Toll Gate Creek and Tributaries**

State Designated Use	Attainment Status	Description	Threatened	Percent Impaired	Date of Determination
Agriculture	Fully Supporting	These surface waters are suitable or intended to become suitable for irrigation of crops usually grown in Colorado and are not hazardous as drinking water for livestock.	No	0	02 March 1999
Aquatic Life Warm Water Class 2	Fully Supporting	These are waters that are capable of sustaining a wide variety of warm-water biota, including sensitive species, due to physical habitat, water flows or levels, or uncorrectable water-quality conditions that result in substantial impairment of the abundance and diversity of species.	No	0	02 March 1999
Recreation Secondary Contact	Fully Supporting	These surface waters are suitable or intended to become suitable for recreational uses on or about the water that are not included in the primary contact subcategory, including but not limited to fishing and other streamside or lakeside recreation.	No	0	02 March 1999

Source: USEPA 2002a

engineered stormwater drainage system. Runoff is ultimately discharged into Toll Gate Creek at the associated outfalls. A breakdown of the estimated existing water transport from the proposed site is found in Table 3-2.

BAFB protects its watershed through compliance with a number of federal, state, local, and USAF environmental regulations that require the installation to have detailed spill control and response procedures and to implement stormwater pollution prevention BMPs. BAFB has developed and maintains in-place specific stormwater protection measures including a draft SWPPP, a draft spill response and countermeasures plan, and a draft hazardous materials management plan.

**Table 3-2
Existing Water Transport Conditions**

Surfaces	Area (acres)	Water Transport (acre feet/year)					
		Precipitation	Stormwater Flow	Evapotranspiration	Runoff	Shallow Infiltration	Deep Infiltration
Impervious	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pervious	3.1	4.1	0.4	1.6	0.0	1.0	1.0
Total		4.1	0.4	1.6	0.0	1.0	1.0

3.2.3 Surface Runoff and Groundwater (Nonpoint Source Discharges)

The primary nonpoint source discharge of concern is surface water runoff and subsurface transport of materials associated with landscaping management activities adjacent to the proposed site. Contaminants of concern include displaced soils, fertilizers, and pesticides. The proposed site is not included in BAFB landscaping activities; therefore, there are no anticipated contaminants of concern being discharged at this location. Any water from the proposed site not introduced to the stormwater system would discharge in the form of surface water runoff and groundwater into an unnamed tributary to Toll Gate Creek. BAFB actively manages its use of potential nonpoint source pollutants to avoid and minimize surface water pollution. These activities include integrated pest management and fertilizer reduction efforts, as well as other standard operating procedures for materials handling and use.

3.2.4 100-Year Floodplains

As discussed previously, an unnamed tributary of Toll Gate Creek is the closest surface water feature to the proposed location. No floodplain maps have been published for any surface water bodies on BAFB, including Toll Gate Creek and its tributaries (Federal Emergency Management Agency [FEMA] 2003).

3.3 AIR QUALITY

Given the regional nature of air quality, the ROI for this resource area is the entire air quality control region (AQCR) that contains BAFB. BAFB is located in Arapahoe County, Colorado, within the Metropolitan Denver AQCR 36. The Denver metropolitan area had been designated by the USEPA as being in serious nonattainment for carbon monoxide (CO), nonattainment for the 1-hour ozone (O₃) standard, and moderate nonattainment for particulate matter less than 10 microns (PM₁₀); however, the region is currently redesignated as being in attainment/maintenance status for CO, O₃, and PM₁₀ (Air Pollution Control Division [APCD] 2002).

BAFB has been identified as a major source of criteria pollutants because it has the potential to emit or has actual emissions of more than 100 tons of any single criteria pollutant. BAFB is currently identified by the APCD as a major Title V source of the PM₁₀ precursors nitrous oxides (NO_x) and sulfur dioxide (SO₂) and is subject to Title V Operating Permit No. 950PAR118. This permit was originally issued on 28 August 1997, most recently reissued as of 01 July 2002, and expires 30 June 2007 (BAFB 2001). In July 2002, the Colorado Department of Public Health and Environment (CDPHE) performed an inspection of stationary source emission units and determined that BAFB was in compliance with the Title V permit.

3.4 BIOLOGICAL RESOURCES

Biological resources present unique problems when trying to identify ROIs. Wildlife species are often migratory or transients and occupy varying locations throughout the year. While stable resources, such as vegetation communities, can normally be defined within a distinct area based on moisture regimes, soil types, and past activities, wildlife resources could be defined based on territorial ranges, which could be much broader. In this EA, the ROI is the entire installation due to the relatively large amount of acreage in comparison to other adjacent properties and its clearly defined boundaries separating areas from adjacent properties. Wildlife resources are also specifically identified for the proposed site and adjacent areas.

3.4.1 Vegetation Communities

In general, the mixed grass-blue grama/western wheatgrass prairies are the most diverse plant habitats and occur primarily on upland areas; the crested wheatgrass prairies are more uniform and have few other species associated with them (BAFB 2000). The seeded crested wheatgrass prairies vegetation type is the largest mapped vegetation type on BAFB and is the type mapped for the proposed site.

3.4.2 Threatened and/or Endangered Species

Federal and state-listed species, including candidate and species of concern, that have been observed at BAFB include bald eagle (*Haliaeetus leucocephalus*), western burrowing owl, and black-tailed prairie dog. Bald eagles would be considered transient, occasional visitors to BAFB, while BAFB contains resident populations of both burrowing owls and black-tailed prairie dogs. Although these species have been observed within the borders of BAFB, there have been no observations of these species or their habitat at the proposed site. Black-tailed prairie dogs and burrowing owls could be located in areas adjacent to the proposed site and could migrate to this area. It is doubtful that any other protected species would occur on BAFB other than as migrants or transient visitors (BAFB 2000; Fayette et al. 2000).

3.5 NOISE

Noise conditions at BAFB can be clearly defined within the noise contours based on the movement of sound waves. The ROI for this resource area is the noise contour containing the proposed site and immediately adjacent areas. Existing noise conditions on BAFB are predominantly influenced by the operational activities of aircraft and by the test run-ups of aircraft engines. Based on the Air Installation Compatible Use Zone (AICUZ) noise contours, the expected day-night sound level (DNL) for the proposed project and surrounding locations is approximately 65 A-weighted decibels (dBA). The proposed project site would fall within this general description, given the setting and environment. There are no residential areas, schools, churches, or hospitals adjacent to the proposed project site.

3.6 SOCIAL OR ECONOMIC RESOURCES (INCLUDING ENVIRONMENTAL JUSTICE)

The socioeconomic conditions of the ROI are similar to those previously described in the H-70 Fuel Storage Facility/Medical Pharmacy EA, dated March 2003, incorporated by reference. The ROI for this issue area is defined as U.S. Census Bureau (USCB) 2000 Census Tract 71.02, Block Group 9, Arapahoe County, Colorado (USCB 2002). For comparison purposes, in the 1990 Census, BAFB was located in USCB Census Tract 71, Block Group 1 (USCB 1993).

3.7 LAND USE AND TRANSPORTATION

The ROI for land use includes the current and planned land uses as described in the BAFB General Plan (2002) for the proposed site, as well as the adjacent areas. The ROI for transportation is the installation transportation networks.

3.7.1 Land Use

Current and planned land uses are similar to those previously described in the H-70 Fuel Storage Facility/Medical Pharmacy EA, dated March 2003, incorporated by reference. Current land uses near the proposed site include open space and industrial. Planned land uses near the proposed site are industrial.

3.7.2 Transportation

The transportation system is similar to that previously described in the H-70 Fuel Storage Facility/Medical Pharmacy EA, dated March 2003, incorporated by reference. Access to BAFB is available via gates at the intersections of Aspen Avenue and Sixth Avenue (North Gate), Aspen Avenue and Mississippi Avenue (South Gate), and Sixth Avenue

and Telluride Avenue (Telluride Gate). Of the traffic entering and departing the installation, 67 percent use the North Gate (BAFB 2002b). Traffic through the Telluride gate is primarily Base Exchange/Commissary traffic, while munitions enter the base through the east side. Aspen Street is a 4-lane, divided street running north to south from the North Gate to A-Basin Street; from this intersection southward, Aspen Street becomes a 2-lane divided roadway to the South Gate. All vehicles entering and departing the installation must use Aspen Street. Breckenridge and Steamboat avenues distribute traffic from Aspen Street to the major industrial and flightline areas (BAFB 2002b). Access to the proposed site would be via Aspen Street.

3.8 PUBLIC UTILITIES

Public utilities are similar to those previously described in the H-70 Fuel Storage Facility/Medical Pharmacy EA, dated March 2003, incorporated by reference. The ROI for this issue area includes the installation utility infrastructure and the adjoining public utility systems.

BAFB wastewater is discharged into the Toll Gate Creek trunk sewer, which is a part of the City of Aurora wastewater collection system (USAF 1998). There are two wastewater outflows on BAFB, one servicing the northern portion of the installation and one servicing the southern portion of the installation. The proposed site would be within the southern service area. The wastewater is treated at the Metro Wastewater Reclamation District wastewater treatment plant, which discharges treated effluent to the South Platte River (USAF 1998). Monitored wastewater discharge points revealed that wastewater discharge levels for BAFB range from 3.56 million gallons for the months during winter, spring, and fall to 9.8 million gallons for the summer months, such as July.

In the first quarter of FY 04, BAFB diverted 193 tons of solid waste from landfill disposal via recycling. BAFB landfill disposed of 329 tons of solid waste and 25 tons of construction and demolition debris. BAFB disposed of 1,585 pounds of hazardous wastes, 2,833 pounds of cleanup generated wastes, and 1,311 pounds of universal wastes.

3.9 HAZARDOUS MATERIALS AND SUBSTANCES

The ROI for this issue area includes the proposed site and immediately adjacent areas. During the first quarter of FY 04, BAFB used approximately 30 pounds of regulated pesticides and 8.5 tons of regulated Class I ozone-depleting substances (ODS). There is a potential for asbestos within areas with known World War II-era development; however, the proposed site is not located in the footprint of any previous World War II buildings; therefore, asbestos is not expected. The proposed site has not been disturbed by past construction or demolition activities associated with World War II-era facilities. Therefore, only a low probability exists that asbestos-containing materials (ACMs) could be encountered during ground-disturbing activities.

SECTION 4.0 ENVIRONMENTAL CONSEQUENCES

This section of the EA forms the basis for the comparison of the alternatives identified in Section 2.3. As previously mentioned, the proposed facility would be constructed on the undeveloped area east of Aspen Drive between the BAFB Fire Station (Building 806) and the Civil Engineering Building (Building 1005) in an area planned for commercial/industrial uses. The discussion presented includes the potential environmental impacts from implementing the proposed action or alternative. Table 4-1 provides a summary of the environmental consequences associated with implementing the proposed action or alternative carried forward for detailed analysis. As demonstrated in Table 4-1, neither the proposed action nor the no action alternative would result in significant impacts to the natural and human environments.

Environmental effects within this EA are analyzed at short-term, long-term, and cumulative levels. According to the CEQ (1997b) in *Considering Cumulative Effects Under the National Environmental Policy Act*, "...Only by reevaluating and modifying alternatives in light of the project cumulative effects can adverse consequences be effectively avoided or minimized." Cumulative effects should be considered in the scoping process of proposed actions to avoid long-term damage to the natural and man-made environments.

Implementing the proposed action or the alternative considered in this EA could potentially result in cumulative impacts. Cumulative impacts can become an important issue when the chosen activity (i.e., construction and operation of an outdoor recreation equipment rental facility) interacts either directly or indirectly with other unrelated actions (past, present, or reasonably foreseeable future). Construction activities scheduled through FY 08 would increase the amount of developed area by approximately 2.8 million SF in new construction, depending on construction scheduling. Total developed areas, including roadways and parking on BAFB, would equal approximately 6.7 million SF by the end of FY 08, if all projects were completed within this period (BAFB 2002b). If all projects are constructed or demolished according to current schedules, there would be a total increase of approximately 35.7 percent in developed surfaces on BAFB over the next four years. A full analysis of the cumulative impacts of all construction activities is currently being undertaken by BAFB as part of implementing the Capital Improvements EA, which analyzes all projects described within the General Plan; therefore, only cumulative impacts due to the proposed construction and operation activities of the outdoor recreation equipment rental facility are identified here. The construction of the outdoor recreation equipment rental facility would involve the development of 2 to 5 acres or approximately less than 1.0 percent of the planned total development activities on BAFB. This proposed construction activity would increase the amount of impervious and built surfaces within the installation; however, construction

SECTION 4.0
ENVIRONMENTAL CONSEQUENCES

Table 4-1
Alternatives Comparison Matrix Summary – All Resources Identified

Environmental Attributes (Threshold Criteria)	No Action	Proposed Action
Groundwater Resources (shallow groundwater resources) (depth to groundwater exceeds proposed excavation depth)	No Yes	No Yes
Wetlands (wetlands present)	No	No
100-Year Floodplain (within the 100-year floodplain)	No	No
Soils (cut-and-fill activities not balanced)	No	No
Historic or Archeological Resources (number of eligible or potentially eligible sites affected)	0	0
Environmental Restoration Program (ERP sites present)	No	No
Radon (building design to reduce/prevent radon exposure)	Yes	Yes
Surface Water Resources and Stormwater (number of surface water features affected) (change in physical or biological water quality parameters) (substantial increase in stormwater flow) (substantial alteration of localized drainage patterns)	0 No No No	0 No No No
Air Quality (increase above de minimis standards)	No	No
Biological Resources (acres of vegetation communities affected) (number of threatened and/or endangered species affected)	0 0	2-5 0
Noise (unacceptable permanent increase above ambient conditions)	No	No
Social or Economic Resources (Including Environmental Justice) (unacceptable change in personal income or employment) (number of minority and/or low-income populations affected)	No 0	No 0
Land Use and Transportation (consistent with adjacent land uses [current and planned]) (unacceptable change in level of service)	No No	Yes No
Public Utilities (unacceptable change in the level of service) (increase the level of wastewater generated)	No No	No Yes
Hazardous Materials and Substances (existing solid/hazardous waste and debris removed)	No	Yes

and operational BMPs would reduce or avoid any immediate adverse impacts to the natural and man-made environments at BAFB.

Certain resource areas and issues were eliminated from detailed analysis in this EA due to the absence of the resources within or adjacent to the proposed sites or due to previous impacts. Since these areas would not be impacted either in the short or long term through implementing the proposed action or selecting the no action alternative, it is unlikely that any cumulative impacts would occur. Those resource areas or issues that were eliminated

included groundwater resources, wetlands, soils, historic or archeological resources, the ERP, and radon. Other resource areas, including surface water resources and stormwater, air quality, biological resources, noise, social or economic resources, land use and transportation, public utilities, and hazardous materials and substances, were analyzed in detail and are discussed in the following sections.

4.1 RESOURCES ELIMINATED FROM DETAILED ANALYSIS IN THIS ENVIRONMENTAL ASSESSMENT

4.1.1 Groundwater Resources

Depth to groundwater is greater than 20 feet below ground surface; therefore, groundwater would not be impacted by implementation of the proposed action or selection of the no action alternative. Since there would be no impacts to this resource area, it has been eliminated from detailed analysis in this EA.

4.1.2 Wetlands

There are no wetlands located within or adjacent to the proposed site. Therefore this resource area has been eliminated from detailed analysis in this EA.

4.1.3 Soils

A geotechnical analysis would be performed to identify the presence of expansive soils, prior to any construction activities. If expansive soils are present at the proposed site, engineering controls to stabilize the soils would be implemented prior to the construction activities. Since soils have already been removed through natural processes, implementing the proposed action or selecting the no action alternative would not cause any further impacts to the soil resources within or immediately adjacent to the proposed site.

4.1.4 Historic or Archeological Resources

Since there are no known archeological or historical resources on or adjacent to the proposed site on BAFB, implementing the proposed action or selecting the no action alternative would not adversely impact these resources. A description of installation cultural resources and cultural resources management is provided in the Draft Final Integrated Cultural Resources Management Plan (BANGB 2000).

4.1.5 Environmental Restoration Program

The proposed site is not located within any known ERP sites or other sites listed on any federal or state hazardous materials/wastes databases. Since the proposed site is located outside any ERP sites, this resource area has been eliminated from detailed analysis in this EA.

4.1.6 Radon

Since radon levels within the proposed facility could create a potential impact if the facility was occupied 8 hours a day or more, design features of the facility would be incorporated to eliminate any impacts from radon; Thus, this resource issue has been eliminated from further study in this EA.

4.2 SURFACE WATER RESOURCES AND STORMWATER QUALITY

Implementing the proposed action could change surface water flows and point and nonpoint discharges, which could disturb or alter localized surface water features and/or floodplains. Point source and nonpoint source discharges are quantified in terms of land use area and in stormwater and non-stormwater flow before, during, and after construction activities. Potential effects to surface water resources are quantified in this EA by acreage and/or linear distance of surface waters affected and/or by a rise in the level of physical and biological parameters as defined by the CDPHE. Significance thresholds include the creation of excess stormwater runoff that would exceed the capacity of existing or planned stormwater drainage systems, or that would result in flooding either on site or off site and substantial alteration of localized drainage patterns. The ROI for this resource area includes the sub-watershed along the western portion of the installation adjacent to the proposed site.

4.2.1 No Action Alternative

Selecting the no action alternative would not result in impacts to hydrologic resources. Since there would be no construction activities, hydrologic resources would remain as described in Section 3.2.

4.2.2 Proposed Action Alternative

Implementing the proposed action would not result in significant impacts to surface water resources or stormwater runoff/management. Small changes in stormwater, surface water, and groundwater movement is expected. As discussed earlier, stormwater BMPs would be implemented to reduce the potential for short-term soil erosion and contaminated stormwater flows. Any hazardous wastes would be disposed of per federal, state, and local laws and regulations. Additionally, design of the facility would include

appropriate spill prevention and containment features to reduce the long-term potential for material loss from the site during operational activities.

4.2.2.1 Surface Water and Potentially Jurisdictional Waters

Implementing the proposed action would reduce the annual evapotranspiration and infiltration near the proposed site by an estimated 1.9 acre-feet per year. This, in turn, would increase stormwater flows by an equivalent 1.9 acre-feet per year (Table 4-2) to be discharged into Toll Gate Creek at the associated outfall location. Although small changes in annual flow would be realized, the proposed action would not alter physical characteristics, including course, channel width, slope, soil characteristics, sediment profile, or flow direction of any of the surface water or potentially jurisdictional waters near the proposed outdoor recreation equipment rental facility. Surface waters would remain as described in Section 3.2.

Table 4-2
Water Transport Conditions Before and
After Implementation of the Proposed Action

Surface	Area (acres)	Water Transport (acre feet/year)					
		Precipitation	Stormwater Flow	Evapotranspiration	Runoff	Shallow Infiltration	Deep Infiltration
Pre-Implementation Conditions							
Impervious	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pervious	3.1	4.1	0.4	1.6	0.0	1.0	1.0
Total		4.1	0.4	1.6	0.0	1.0	1.0
Post-Implementation Conditions							
Impervious	1.6	2.1	2.1	0.0	0.0	0.0	0.0
Pervious	1.5	2.0	0.2	0.7	0.0	0.5	0.5
Total		4.1	2.3	0.7	0.0	0.5	0.5
Change		0.0	1.9	(0.9)	0.0	(0.5)	(0.5)

4.2.2.2 Stormwater and Sanitary Sewer (Point Source Discharges)

During construction activities associated with the proposed facility, no change in stormwater flow is anticipated. Regular inspection and maintenance of stormwater collection points, such as catch basins, would ensure containment of construction debris, displaced silt, and fuel, oil, grease, and coolants from construction equipment. As discussed earlier, in accordance with the NPDES and USEPA requirements, coverage under the USEPA Construction General Permit would be obtained, and a site-specific SWPPP in accordance with the draft basewide SWPPP would be implemented to reduce the potential for soil erosion and contaminated stormwater and surface water flows due to construction activities.

After the construction and installation activities have concluded, there would be a slight increase in stormwater collected, managed, and discharged due to the new structures and

the increase in impervious surfaces. Approximately 1.9 acre-feet per year of precipitation previously lost to transpiration or soil infiltration would be converted to stormwater flow on an annual basis (see Table 4-2). The stormwater system would be upgraded, as necessary, to support the proposed action and other planned activities on BAFB. This additional stormwater, without changes in operations, would constitute a proportional decrease in concentrations of contaminants of concern in discharged stormwater at the associated outfalls due to increased dilution through greater stormwater flows. Active BMPs and collection and management of these additional stormwater flows would minimize any chance for increased transport of contaminants into local waterways.

An outdoor wash pad would be constructed as part of the proposed action. BMPs would be in place during the operation of the wash facility. The wash pad area would be sloped, bermed, and either roofed or contain diversion valves to prevent discharge to the storm drain and to prevent excess stormwater from running into the pad area. Discharge of vehicle wash water to the storm drain would be limited to water from the washing of vehicle exteriors with plain water only. All wastewater collected from pressure washing, steam cleaning, hand scrubbing, or containing detergents would be disposed of into the sanitary sewer.

As with the wash pad, BMPs would be in place during the operation of the RV dump station. The dump station area would be sloped and bermed to prevent discharge to the storm drain and to prevent excess stormwater from running into the dump station area. Routine inspections and maintenance would be performed in the dump station area to ensure containment and clean up of any incidental spills. If a hose is provided for tank rinsing, clear instructions to limit its use for this purpose would be posted. This activity would be added to BAFB's Slug Loading and Control Plan pending approval from the Metro Wastewater Reclamation District.

Additionally, a small gasoline storage tank would be installed and maintained as part of the proposed action. In-place primary and secondary containment would be installed to control unexpected releases of hazardous materials into the surrounding media, including the stormwater system. Any drains in the immediate vicinity of the tank would not discharge into the stormwater system. Berms or barriers suitable for the size of the tank and expected vehicles would be installed to reduce the risk of catastrophic failure of the tank due to accident or collision. A spill kit suitable for the size and type of transfer activity would be located on site. Routine inspections and maintenance would be performed in the area to ensure containment and clean up of any incidental spills.

4.2.2.3 Surface Runoff and Groundwater (Nonpoint Source Discharges)

Since erosion-controlling BMPs would be in place as part of the proposed action implementation, increased siltation due to transport of disturbed soils are not expected (Table 4-3). Additionally, the BMPs would reduce the potential for small

Table 4-3
Estimated Undeveloped, Open Ground, and Developed
Nonpoint Source Discharges during Different Stages of the Proposed Action

Conditions	Nonpoint Source Discharge (acre feet/year)			
	Undeveloped	Open Ground	Developed and Maintained	Converted to Stormwater
Existing	4.1	0.0	0.0	0.0
During Construction	0.0	4.1	0.0	0.0
After Construction	0.0	0.0	2.2	1.9

quantities of construction equipment fluids to be transported in surface runoff or to infiltrate the subsurface environment. All hazardous materials associated with construction activities would be handled according to federal, state, and local guidelines, and all hazardous wastes would be disposed of at an approved landfill to minimize the potential for surface or groundwater contamination.

At the conclusion of construction activities, the effective area of landscaped and maintained surfaces would increase slightly on BAFB. Nonpoint source discharge such as surface water runoff and subsurface transport of materials associated with landscaping management activities would proportionally increase. The subsequent collection of additional stormwater would reduce the concentrations in stormwater and groundwater transport and in discharge of many potential water contaminants, including silts, fuel, oil, grease, and coolant (see Table 4-3).

4.2.2.4 100-Year Floodplain

Implementing the proposed action would create neither on- or off-site flooding nor any substantial alteration of localized drainage patterns. Estimated peak stormwater flow rates for a 10-, 25-, 50-, and 100-year storm event with durations of 2 and 24 hours are listed in Table 4-4. Although there is no anticipated change to the 100-year floodplain, the potential for localized on-base flooding during a significant precipitation event would be monitored.

4.2.3 Cumulative Impacts

There would be no significant cumulative impacts to hydrologic resources due to implementing the proposed action or selecting the no action alternative. However, there would be more stormwater discharged, collected, and managed due to the increase in impermeable surfaces. Estimated average annual stormwater flows are listed in Table 4-5. Active BMPs and collection and management of these additional surface waters as

Table 4-4
Peak Stormwater Flows for the Proposed Action
during 10-, 25-, 50-, and 100-Year Storm Events

Storm Frequency (years)	Duration (hours)	Peak Intensity (in/hr)	Flow Rates (ft³/s)
10	2	0.90	1.37
10	24	0.08	0.13
25	2	1.06	1.70
25	24	0.11	0.17
50	2	1.13	1.82
50	24	0.11	0.18
100	2	1.44	2.30
100	24	0.14	0.23

in/hr = inches per hour

ft³/s = cubic feet per second

Table 4-5
Estimated Average Annual Stormwater Flows for BAFB

Construction Period	Estimated Impervious Surface Area (acres)	Estimated Stormwater Flow* (acre feet/year)	Precipitation Converted to Collected Stormwater (acre feet/year)
All Previous Construction	413.9	545.3	0.0
FY 02	432.6	570.0	24.7
FY 03	443.2	583.9	38.6
FY 04	467.8	616.3	71.0
FY 05	479.9	632.2	86.9
FY 06	484.2	637.9	92.6
FY 07	488.7	643.8	98.5
FY 08	491.4	647.5	102.2
FY 09	510.7	672.8	127.5
Proposed Action	1.6	2.1	2.1
Percent Accounted for by the Proposed Action	0.3	0.3	1.7

*Assumes average annual precipitation of approximately 16 inches

implemented through the proposed action would minimize any chance for increased discharge concentrations.

When implementation of the proposed action or selection of the no action alternative is combined with previous and other foreseeable future activities, flooding potential could be increased. Estimated peak stormwater flow rates for a 10-, 25-, 50-, and 100-year storm event with durations of 2 and 24 hours are listed in Table 4-6.

Table 4-6
Peak Stormwater Flows for BAFB during 10-, 25-, 50-, and 100-Year Storm Events

Storm Frequency (years)	Duration (hrs)	Peak Intensity (in/hr)	Peak Storm Water Flow Rates (ft ³ /s)			
			Previous	After Reasonably Foreseeable Future (FY 02-09)	Proposed Action	Percent Reasonably Foreseeable Future Peak Flow Due to Proposed Action
10	2	0.9	353.1	435.7	1.4	0.3
10	24	0.1	34.5	42.6	0.1	0.3
25	2	1.1	439.4	542.1	1.7	0.3
25	24	0.1	43.8	54.0	0.2	0.3
50	2	1.1	469.7	579.5	1.8	0.3
50	24	0.1	45.3	55.9	0.2	0.3
100	2	1.4	595.3	734.5	2.3	0.3
100	24	0.1	59.3	73.1	0.2	0.3

ft³/s = cubic feet per second

hrs = hours

in/hr = inches per hour

4.3 AIR QUALITY

Impacts to air quality would be considered significant if any criteria pollutant emissions associated with implementation of the proposed action or selection of the no action alternative would exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀; would be regionally significant; or would contribute to a violation of the Title V permit limitations. The air quality analysis examined impacts from air emissions associated with the construction of the outdoor recreation equipment rental facility. As part of the analysis, emissions generated from construction, motor vehicles, and other (nonmobile) sources were examined for CO, volatile organic compounds (VOCs), SO₂, NO_x, and PM₁₀.

4.3.1 No Action Alternative

Selecting the no action alternative would result in no impacts to ambient air quality conditions of the project area or surrounding areas since no construction activities would be undertaken. Ambient air quality conditions would remain as described in Section 3.3.

4.3.2 Proposed Action Alternative

Implementing the proposed action would have a minor, temporary impact on local air quality; however, emissions are not expected to exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀; be regionally significant; or contribute to a violation of Title V permit limitations. The primary impact would be

directly related to the generation of PM₁₀ at and around the project area during the preliminary stages of construction. These emissions would primarily be a function of (1) construction activities, such as grading and excavation; (2) movement of dust (wind erosion) from “piled” materials; and (3) mechanical entrainment of road dust.

4.3.2.1 Construction Activities

The potential air quality impacts resulting from construction activities would be minor and temporary, and would disperse with distance from the project area. Implementing abatement measures such as proper maintenance of construction vehicles, limiting the size of the disturbance area, and watering unpaved roadways as necessary would minimize potential impacts.

Watering the disturbed area twice per day with approximately 3,500 gallons per acre would reduce TSP emissions by as much as 50 percent (USEPA 1995). A PM₁₀ emissions factor of 0.6 ton per acre per year (5.18E-5 grams per square meter per second [g/m²s]) was estimated for this activity with sufficient watering (USEPA 1995). Fugitive particulate emissions due to the heavy construction activities are the only anticipated stationary sources of emissions during the construction phase of the proposed action. These increases would not significantly contribute to a violation of Title V permit limitations (Table 4-7).

Table 4-7
Construction PM₁₀ Emissions from Stationary Sources

PM₁₀ Emissions	TPY
Baseline ¹	12.0
Proposed Construction	1.2
Projected Total Due to Proposed Action	13.2
Title V Permit Limits	99.9

¹ Total Stationary Source Emissions at BAFB (2001)
TPY = tons per year

The maximum PM₁₀ concentration of 123.5 micrograms per cubic meter (µg/m³) at a distance of 246 feet from the construction site boundary was compared to the primary and secondary National Ambient Air Quality Standard (NAAQS) PM₁₀ for 24 hours of 150 µg/m³. Since the maximum-modeled concentration is below the NAAQS for particulates, a potential for an elevated local concentration of PM₁₀ is not anticipated for this temporary activity. No decrease in visibility and subsequently no impact to airfield operations or aircraft safety is anticipated for the proposed action. Because the grading and construction activities are low to the ground, these estimated concentrations would drop off rapidly in a short distance; as a result, temporary impacts would be local and not regional. These estimates are averages, and at any instant, the actual instantaneous concentration is likely to be higher or lower based on local wind conditions.

Exhaust-related emissions from construction equipment were estimated for diesel-powered, off-road equipment (USEPA 1991; Waier 2001). Criteria pollutant emissions associated with the implementation of the proposed action or selection of the no action alternative do not exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀. The proposed action is not regionally significant because the emissions do not exceed 10 percent or more of the attainment/maintenance area's total emissions for that particular pollutant (AQCR 36) (Table 4-8).

Table 4-8
Estimated Construction Emissions Compared to AQCR 36 Total Emissions

Criteria Pollutants	AQCR 36 Total Emissions* (tpd)	Construction Emissions (tpd)	Percent Total	Regionally Significant
NO _x	313	0.0501	0.0160	No
SO _x	180	0.0034	0.0019	No
VOCs	507	0.0081	0.0016	No
CO	1,203	0.0611	0.0051	No
PM ₁₀	70	0.0053	0.0075	No

tpd = tons per day

Source: Colorado Air-quality Control Commission (CAQCC) 2000, 2001a, 2001b

4.3.2.2 Operational Activities

There would be minor operational emissions after the completion of construction activities. For the operation of the proposed facility, a corresponding estimate increase in basewide natural gas usage of 1,130,000 cubic feet per year is anticipated for heating and cooling. Associated emissions would not exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀; would not be regionally significant and would not contribute to a violation of Title V permit limitations.

Estimated organic and inorganic HAP emissions that would result from implementing the proposed action, estimated at 0.00107 tons per year, are listed by individual organic and inorganic component in Table 4-9. The additional HAP emissions constitute less than 0.1 percent of the entire on-base HAP emissions, which is 0.83 ton per year at BAFB.

4.3.3 Cumulative Impacts

There would be no significant cumulative impacts to air quality due to implementation of the proposed action or selection of the no action alternative.

4.3.3.1 Construction Activities

The PM₁₀ emissions were identified as the primary pollutant from proposed construction activities. The PM₁₀ emissions anticipated during construction activities are listed in

**Table 4-9
Basewide Estimated HAP Emissions**

Constituent	Emission Factor (lb/10 ⁶ ft ³)	Fuel (10 ⁶ ft ³)	Total Increase in HAP Emissions (tpy)
Organics			
Benzene	2.10E-03	1.13	1.19E-06
Dichlorobenzene	1.20E-03	1.13	6.79E-07
Formaldehyde	7.50E-02	1.13	4.24E-05
Hexane	1.80E+00	1.13	1.02E-03
Naphthalene	6.10E-04	1.13	3.45E-07
Polycyclic Organic Matter	8.85E-05	1.13	5.01E-08
Toluene	3.40E-03	1.13	1.92E-06
Total			1.06E-03
Inorganics			
Arsenic	2.00E-04	1.13	1.13E-07
Beryllium	1.20E-05	1.13	6.79E-09
Cadmium	1.10E-03	1.13	6.22E-07
Chromium	1.40E-03	1.13	7.92E-07
Cobalt	8.40E-05	1.13	4.75E-08
Lead	5.00E-04	1.13	2.83E-07
Manganese	3.80E-04	1.13	2.15E-07
Mercury	2.60E-04	1.13	1.47E-07
Nickel	2.10E-03	1.13	1.19E-06
Selenium	2.40E-05	1.13	1.36E-08
Total			3.43E-06

lb = pound
10⁶ = 1,000,000
ft³ = cubic feet
tpy = tons per year

Table 4-10. These emissions levels do not constitute a significant cumulative impact. The analysis was based on approximate building square footage and surface parking.

4.3.3.2 Operational Activities

There would be minor ongoing operational emissions after completion of construction activities. The emissions due to heating and cooling support of existing and reasonably foreseeable future construction at BAFB are not significant. Total cumulative emissions are not anticipated to exceed the rates specified for attainment/maintenance areas for CO, O₃, and PM₁₀; be regionally significant; or significantly contribute to a violation of Title V permit limitations (Table 4-11). The analysis was based on approximate occupied building square footage and surface parking.

Table 4-10
Basewide PM₁₀ Emissions for Previous, Proposed,
and Reasonably Foreseeable Future Construction Activities

Emissions	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Baseline Basewide PM ₁₀ Emissions (tons)	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
PM ₁₀ Emissions from Proposed Action (tons)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Other Reasonably Foreseeable Construction PM ₁₀ Emissions (tons)	14.8	1.2	9.4	1.9	0.2	0.5	0.4	17.7
Total (tons)	76.9	63.4	71.6	64.0	62.4	62.6	62.6	79.9
Title V Permit Limits for Potential PM ₁₀ Emissions (tons)	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
Percent Emissions Accounted for by the Proposed Action	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0

NA = not applicable

Table 4-11
Basewide Emissions for Previous, Proposed, and
Reasonably Foreseeable Future Heating and Cooling Activities

Emissions	Occupied Space (acres)	Estimated Natural Gas Usage for Heating and Cooling (10 ⁶ ft ³)	CO (tpy)	NO _x (tpy)	PM ₁₀ (tpy)	SO _x (tpy)
All previous construction	50.6	199.8	8.2	10.0	0.8	0.1
FY 02	53.1	209.7	8.6	10.5	0.8	0.1
FY 03	58.3	230.1	9.5	11.5	0.9	0.1
FY 04	59.3	234.3	9.7	11.7	0.9	0.1
FY 05	64.6	255.2	10.5	12.7	1.0	0.1
FY 06	66.7	263.6	10.9	13.2	1.0	0.1
FY 07	73.8	291.4	12.0	14.5	1.1	0.1
FY 08	73.8	291.4	12.0	14.5	1.1	0.1
FY 09	74.3	293.5	12.1	14.6	1.1	0.1
Proposed Action	0.2	1.1	0.023	0.053	0.0043	0.00034
Proposed Action as a Percentage of Estimated 2009 Heating and Cooling Emissions			0.2	0.4	0.7	0.0
2000 Basewide Emissions			40.2	111.5	71.4	14.9
Proposed Action as a Percentage of 2000 Basewide Emissions			0.06	0.05	0.01	0.00

10⁶ = 1,000,000

ft³ = cubic feet

tpy = tons per year

Construction activities would increase the amount of short-term mobile emissions on BAFB; however, active monitoring and maintenance of construction equipment would reduce overall impacts during construction activities. Operational emissions should be minor and not add significantly to BAFB total yearly emissions.

4.4 BIOLOGICAL RESOURCES

The U.S. Fish and Wildlife Service (USFWS) and the Colorado Division of Wildlife (CDOW) maintain protected species lists (endangered, threatened, proposed candidate, or species of concern) for species that occur or could potentially occur within Arapahoe County. If species do occur, implementing the proposed action or alternative could affect these species and their habitat through ground-disturbing activities and increase in impervious cover. Potential effects to biological resources for both listed and nonlisted species will be estimated in this EA based on the number of acres of habitat and/or the number of individual species affected. Impacts to biological resources would be significant if there were substantial adverse effects on protected species or their habitats or if there were any substantial adverse impacts to other sensitive habitats. The ROI for this resource area is the proposed site, as compared to the rest of the installation.

4.4.1 No Action Alternative

Selecting the no action alternative would result in no ground-disturbing activities and therefore no alteration/disturbance of existing vegetative cover. Due to the absence of ground-disturbing activities at the proposed site, vegetation and wildlife, including protected species, would not be impacted.

4.4.2 Proposed Action Alternative

Implementing the proposed action would not result in significant impacts to biological resources. The proposed action would remove approximately 2.0-5.0 acres of planted crested wheatgrass prairie, which is highly prevalent in disturbed areas and is not considered a sensitive community type.

Additionally, no black-tailed prairie dogs and/or burrowing owls, or their habitat, have been observed on or adjacent to the proposed site. In accordance with BAFB policy, surveys would be conducted prior to commencement of construction activities to verify the presence/absence of either black-tailed prairie dogs or burrowing owls. Any black-tailed prairie dogs present would be removed prior to commencing construction activities using approved removal methods. If nesting burrowing owls are present, construction activities would be scheduled between November through February, when nesting owls would not be present or activities would commence once the burrowing owls have fledged and can be removed from the nests, which would ensure no long-term impacts to this species. If black-tailed prairie dogs and/or burrowing owls are identified after

commencement of construction, construction activities would be halted and the 460 ABW Environmental Management (CES/CEVP) would be contacted for further instructions.

4.4.3 Cumulative Impacts

Construction and operational activities associated with the implementation of the proposed action would remove approximately 2.0-5.0 acres of undeveloped vegetation, which is less than 1.0 percent of the total undeveloped surface on BAFB. There are currently no black-tailed prairie dogs and/or burrowing owls located within the proposed site, and therefore development associated with the proposed action would not, in the short term, cumulatively impact these populations on BAFB. Black-tailed prairie dogs and burrowing owls would be managed under the guidance of the Supplemental EA of the Proposed Prairie Dog Management Practices at BAFB, dated June 2001.

4.5 NOISE

This EA evaluates potential changes to existing noise environments that would result from implementation of the proposed action or selection of the no action alternative. Construction noise and its potential impacts on nearby receivers are addressed. Impacts would be considered significant if there are long-term increases in the number of people highly annoyed by the noise environment, noise-associated adverse health effects to individuals, or unacceptable increases to the noise environment for sensitive receptors. A sensitive receptor is any person or group of persons in an environment where low noise levels are expected, such as schools, day cares, hospitals, and nursing homes. The ROI for this noise analysis is the area within a 500-foot radius of the construction site boundary. This is the estimated distance necessary to attenuate the overall noise environment to a level not noticeably different from that outside the proposed construction area.

4.5.1 No Action Alternative

Selecting the no action alternative would result in no impact to the existing noise conditions of the project area and surrounding areas. Under this alternative, there would be no construction or operational activities conducted, and as a result, there would be no change in the current noise environment. It would remain as described in Section 3.5.

4.5.2 Proposed Action Alternative

Implementing the proposed action would have a minor, temporary impact on the noise environment. Implementing the proposed action would increase the levels of noise within the immediate project area through the use of construction equipment. The sound would attenuate rapidly with distance from the site. There are no sensitive receptors,

communities, or individual residences within audible distance of the construction site. The overall noise environment with respect to sensitive receptors, communities, and individual residences would be the same as if no construction activities were taking place.

The primary sources of construction noise would be due to the use of soil-moving units (i.e., backhoe or graders), heavy trucks, and additional light construction equipment (Waier 2001). Changes in DNL of less than 3 dBA are not considered noticeable (Federal Interagency Committee on Noise [FICON] 1992). Since the existing DNL is 65 dBA, a noticeable change would only be detected by those receptors exposed to DNL 68 dBA or greater.

No sensitive receptors, communities, or individual residences are located within the ROI; therefore, no sensitive receptors, communities, or individual residences would notice a change in the overall noise environment during construction activities. Periodically, the construction equipment may be audible at distances greater than 200 feet from the construction site boundary, but there would be no significantly noticeable change in the overall noise environment. Brief acoustical events could occur and have minor effects on speech intelligibility by way of brief and unnoticeable interruptions in communication. Due to the daytime hours of construction operations, no sleep disturbances are expected. In general, the average reaction of receptors outside the ROI to the noise environment would be the same as if no construction activities were taking place.

There are a very limited number of noise sources associated with operation of the proposed facility, such as cars and RVs generating low-level noise. A DNL of 69.1 dBA was estimated at the site boundary for days with 8 hours of heavy operational activities. The estimated change to the in situ noise environment will be unnoticeable beyond the site boundary. Therefore, due to the limited noise levels and the frequency and duration of acoustical events, operation of the outdoor recreational facility would be consistent with or less than the existing noise levels in the area of the proposed site.

4.5.3 Cumulative Impacts

Implementing the proposed action would have no ongoing or cumulative impacts on the noise environment. The past, current, and reasonably foreseeable future noise environment in and around the proposed site is dominated by military jet aircraft noise. The construction and operational noise from the outdoor recreation equipment rental facility would be insignificant compared to the cumulative noise environment.

4.6 SOCIAL OR ECONOMIC RESOURCES (INCLUDING ENVIRONMENTAL JUSTICE)

Implementing the proposed action or selecting the no action alternative could affect the local demographics, employment, and income potential, as well as localized minority and/or low-income populations. Impacts would be considered significant if an unacceptable change (i.e., significant loss or decrease) in these components occurs. There would be significant environmental justice impacts if a disproportionate amount of the adverse effects of the action was felt by minority and/or low-income populations. The ROI for this issue area is defined as USCB 2000 Census Tract 71.02, Block Group 9, Arapahoe County, Colorado (USCB 2002).

4.6.1 No Action Alternative

Selecting the no action alternative would result in no impacts to social or economic resources, including population, income and employment, or housing, in Arapahoe County or within the USCB census tract containing BAFB.

4.6.2 Proposed Action Alternative

Similar to the no action alternative, implementing the proposed action would result in no significant impacts to social or economic resources, including population, income and employment, and housing, within Arapahoe County or within the USCB census tract containing BAFB. Construction activities, if provided by an outside contractor, would be likely to increase short-term spending within the area immediately surrounding BAFB; however, this impact would have likely occurred elsewhere in the region, unless new employment opportunities were created or formerly unemployed workers found employment. Construction spending would be concentrated within the local area, thereby reducing the probability of a change in population growth based on this alternative. Without a change in the population growth rate, housing starts would likely remain static. The only anticipated impacts from implementing the proposed action would be the short-term spending increase for goods and services (food and beverage retailers) within the immediate vicinity of BAFB, which would subside after construction activities have concluded.

Arapahoe County would not be considered an area of concentrated minority population, nor would it be considered a poverty area. Likewise, USCB Census Tract 71.02 and Block Group 9 would not be considered areas of concentrated minority population or poverty areas. Since there would be no long-term impacts to population, income and employment, and housing, there would be no disproportionate impacts to minority or low-income populations.

4.6.3 Cumulative Impacts

There would be no cumulative social or economic impacts due to the proposed action or alternative since there would not be an increase or decrease in total employment at BAFB.

4.7 LAND USE AND TRANSPORTATION

Potential land use impacts are based upon an area's degree of sensitivity to land use changes. Typically, land use impacts are thought to be significant if they would: (1) violate or otherwise be inconsistent with adopted land use plans or policies; (2) undermine the viability of a favored existing land use activity; (3) create threats to the public health, safety, and welfare of the occupants of adjacent or nearby land uses; or (4) conflict with the fundamental mission of an installation. Impacts to transportation networks would be significant if the total capacity of the system was exceeded. The ROI for land use includes the current and planned land uses as described in the BAFB General Plan for the proposed site, as well as the adjacent areas. The ROI for transportation is the installation transportation networks.

4.7.1 No Action Alternative

Selecting the no action alternative would result in no change to current or planned land uses. Outdoor recreation activities, such as leasing, renting, and some training, would continue at multiple locations on BAFB. Under the no action alternative, no construction activities would be undertaken.

4.7.2 Proposed Action Alternative

Implementation of the proposed action would result in no significant impacts to land use at BAFB. Implementing the proposed action would be consistent with the BAFB General Plan and with the planned land uses. The proposed use is consistent with the planned industrial designation of the proposed site. Additionally, this alternative would be consistent with AICUZ planning and design guidelines. Implementing the proposed action would not adversely impact planned adjacent land use, which is industrial.

Implementing the proposed action would not result in significant impacts to transportation resources. There may be minor, temporary, negative impacts to Aspen Avenue resulting from increased traffic associated with construction activities. There would be no permanent changes to on- or off-base transportation patterns, capacity, or volume.

4.7.3 Cumulative Impacts

Under the proposed action, all activities would be located consistent with the BAFB General Plan, thereby not creating cumulative impacts to land use on BAFB. Since these activities would be located within the interior of the installation, there should be no impacts to current or planned land use activities on nonmilitary lands surrounding BAFB. The General Plan was developed in coordination with surrounding communities to lessen future impacts that developments on BAFB could potentially create. Future developments on BAFB would occur within the appropriate land use category as described in the General Plan, which coincides with planned land uses of adjacent nonmilitary lands, and thus would avoid cumulative impacts to land use and transportation.

4.8 PUBLIC UTILITIES

Potential impacts to public utilities are based upon the capacity of the existing systems. A significant impact to public utilities would be an exceedance to the current capacity of the system. The ROI for this issue area is the installation utility infrastructure system and the adjoining public utility systems.

4.8.1 No Action Alternative

Selecting the no action alternative would result in no changes to the public utilities in and around BAFB. There would be no construction of new facilities and no increase in demand for utilities, such as energy or water services. Under this alternative, outdoor recreation leasing, rental, and some training would remain at multiple locations on BAFB. As a result, no significant adverse impacts would occur, and baseline conditions would remain as described in Section 3.8.

4.8.2 Proposed Action Alternative

Implementing the proposed action would result in no significant impacts to public utilities. The proposed action would likely result in long-term minor additional demands on municipal public utilities. However, the increased utility demand would not be substantial and should be within the existing capacity of the provider.

4.8.3 Cumulative Impacts

Future development at BAFB could cumulatively double utility demand between FY 03 and FY 08 over current utilities demand based on planned square footage increases at BAFB (Table 4-12). Since implementing the proposed action would require continued use of existing public utilities, there would be an increase in demand for these services.

SECTION 4.0
ENVIRONMENTAL CONSEQUENCES

According to the Western Electricity Coordinating Council (WECC), projected generation and transfers for electrical power in the Rocky Mountain Power Area should exceed peak demand between 2003 to 2012 (WECC 2003). Generation and transfers would vary between 10,000 to 14,000 megawatts (MW) during peak demand under adverse hydrologic periods (WECC 2003). Additionally, power generation in Colorado accounted for 9,435 MW of summer peak capacity in 2002 (Energy Information Administration [EIA] 2004). Utility retail sales in 2002 was approximately 46 million MW hours, which accounts for an annual average growth in retail sales of approximately 3.8 percent (EIA 2004). As such, the increased demand by BAFB for electrical power would not be a substantial impact to regional or local energy supplies.

Table 4-12
Basewide Estimated Increase in Utility Demand

Parameter	Current	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	Proposed Action
SF	3,700,000	1,254,611	531,127	333,435	87,956	65,398	479,973	9.300
Electricity (kwh/m ²)	9,942,583	5,054,219	2,139,653	1,343,248	354,332	263,457	1,933,578	37,465
Gas (ft ³ /m ²)	175,469	89,198	37,761	23,706	6,253	4,650	34,124	661
Water (mgm ^{***})	7.00	3.39	1.44	0.90	0.24	0.18	1.30	0.03
Cumulative Percent Increase in Utility Demand		50.8	72.4	85.9	89.4	92.1	111.5	0.04

* Average electricity usage per square foot = 4.03 kilowatt hour based on FY 02 utility usage at BAFB

** Average gas usage per square foot = 0.07 cubic feet based on FY 02 utility usage at BAFB

*** Average water usage per square foot = 9.01E-08 million gallons per day based on FY 02 utility usage at BAFB

kwh/m = kilowatt hour per month

ft³/m = cubic feet per month

mgm = million gallons per month

4.9 HAZARDOUS MATERIALS AND SUBSTANCES

Implementing the proposed action or selecting the no action alternative could disturb and/or generate hazardous wastes, consume hazardous materials, and/or disturb known hazardous materials facilities listed on federal and state databases. Potential effects associated with hazardous materials will be determined by the absence/presence of listed facilities within standard search radii and the hazardous waste management requirements associated with construction activities. The ROI for this issue area would be the proposed site and immediately adjacent areas.

4.9.1 No Action Alternative

Selecting the no action alternative would result in no ground-disturbing activities; therefore, there would be no alteration or disturbance of soils and no generation of wastes as the result of construction activities.

4.9.2 Proposed Action Alternative

4.9.2.1 Hazardous Materials and Hazardous Wastes

Implementing the proposed action would result in no significant adverse impacts from hazardous materials/hazardous wastes used or generated at BAFB.

4.9.2.2 Asbestos

Implementing the proposed action would result in no significant impacts from subsurface ACM. ACMs are not expected to occur at the proposed site since the site is outside the footprint of World War II-era structures formerly occupying BAFB. However, if any subsurface debris is located activities would be halted and the area would be evaluated. Appropriate response plans would then be developed and implemented, as necessary, per applicable laws and regulations to ensure that contamination, if present, would not be released into the environment.

4.9.3 Cumulative Impacts

All hazardous materials and hazardous wastes used or generated during implementation of the proposed action would be used and disposed of according to all applicable regulations, thereby ensuring no cumulative impacts. Following all federal, state, and local laws and regulations, all new materials used for construction would not contain ACM, and if any ACMs were found during the construction of the facilities, the ACMs would be disposed of following all applicable regulations, thereby ensuring no cumulative impacts.

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SECTION 5.0 LIST OF PREPARERS

Name/Title	Expertise/Experience	Involvement
Chris Clark, Geo-Marine, Inc. <i>NEPA Specialist</i>	NEPA Studies <i>4 years</i>	Transportation Public Utilities
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Melissa Green, Geo-Marine, Inc. <i>Principal Investigator</i>	Anthropology <i>20 years</i>	Cultural Resources
Kurt Hellauer, Geo-Marine, Inc. <i>Airspace and Land Use Analyst</i>	Land Use <i>13 years</i>	Land Use
Tim Lavalley, LPES, Inc. <i>Air Quality Specialist</i>	Air Quality <i>4 years</i>	Surface Water and Stormwater Air Quality Noise
Ron Moore, Geo-Marine, Inc. <i>NEPA Program Manager</i>	NEPA Studies <i>10 years</i>	NEPA Review
David Pitts, Geo-Marine, Inc. <i>Biologist</i>	Biology <i>12 years</i>	Hydrologic Resources Biological Resources
Rae Lynn Schneider, Geo-Marine, Inc. <i>NEPA Project Manager/Economist</i>	NEPA Studies Economic Analysis <i>4 years</i>	Project Management Purpose and Need Alternatives Visual Resources Social or Economic Resources

SECTION 5.0
LIST OF PREPARERS

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SECTION 6.0
DISTRIBUTION LIST AND
AGENCIES AND INDIVIDUALS CONTACTED

6.1 DISTRIBUTION OF THE DRAFT ENVIRONMENTAL ASSESSMENT

As part of CEQ regulations (§1503.1), public comments on the Draft EA were invited. This process helps decision makers and the public to understand and have input on the environmental effects of federal actions. This EA was distributed to the following local libraries and federal agencies for public review and comment period (30 February to 30 March 2004).

Aurora Central Library
14949 East Alameda Parkway
Aurora, Colorado 80012

Denver Public Library, Government
Documents Section
10 West 14th Avenue
Denver, Colorado 80204

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6.2 COMMENTS AND RESPONSES TO COMMENTS

As part of the public and agency comment period BAFB received five agency comment letters from the City of Aurora, CDPHE, Colorado Division of Wildlife, the USEPA – Region 8, the Metro Wastewater Reclamation District. The comments and BAFB’s responses to these comments are detailed in the following table. All agency letters and response letters can be found in Appendix E.

Table 6-1
Agency Comments and BAFB Responses to Comments

Comment Number	Agency Comment	BAFB Response
City of Aurora (10 March 2004)		
1	<p>Staff concurs with the assessment that no significant environmental impacts will result from the construction and operation of the proposed facility. Staff did remark that this document was one of the more accurate and well-written EAs prepared by BAFB contractors this year.</p> <p>However, as indicated previously, the base appears to be continuing with a piecemeal approach in conducting the environmental assessments of multiple construction projects on the base. To date this year alone, the City has received four separate draft EAs for review and comment. There is the potential that some cumulative impacts may not be adequately evaluated when each project is considered individually.</p>	<p>Buckley AFB is preparing an EA that will cover all cumulative impacts. The timeline for this EA has slipped; however, we anticipate a Draft EA by September 2004. While this EA addresses cumulative impacts for past, present, and future construction projects, it will only serve as a Programmatic EA from which to tier future EAs. As stated in previous correspondence dated 24 June 02, all attempts are made to include all projects into an annual EA; however, this is not feasible due to the following:</p> <ul style="list-style-type: none"> • Additional projects are identified that cannot be included in the present or future years EAs due to construction and/or funding timelines • Tenant organizations program and pay for EAs for their own projects. • Funds received at different times of the year, as with non-appropriated versus appropriated funds.
2	<p>The main hazardous materials and water quality issues addressed in the document include the construction and operation of an RV dump station, a vehicle wash pad, and a gasoline storage tank. Measures to protect storm water from potential discharges from the dump station and wash pad appear to be adequate. The document states that wastewater from these operations will be discharged to sanitary sewer in accordance with the discharge permit from the Metro Wastewater District. In addition, the proposed secondary containment around the gasoline tank appears to provide appropriate spill control</p>	<p>Comment noted. We understand you find the measures adequate and appropriate.</p>

SECTION 6.0
DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED

Comment Number	Agency Comment	BAFB Response
City of Aurora (10 March 2004) (cont'd)		
3	The proposed size of the gasoline tank should be stated in the document. The applicant should also discuss whether or no the tank needs to be registered with the Colorado Department of Labor and Employment, Oil Inspection Section.	The EA will be modified as there will no longer be a gasoline storage tank. There would be minimal gasoline, stored in one-gallon containers in a flammable locker.
4	Gravel surface is proposed for the outdoor storage area, RV parking, and customer employee parking. Spills and leaks are the largest industrial sources of storm water pollutants. This porous surfacing can increase the potential risk for soil, surface water and groundwater contamination. Dripping engine and automotive fluids from parked RV and other vehicles and equipment can result in localized contamination of soils and contribute to the contamination of surface runoff (storm water). Infiltration of storm water runoff may also contaminate groundwater. The vehicular leaks can include oil, gasoline, grease, hydraulic fluids, and antifreeze. In addition, leaks from RV wastewater systems, tanks, and drains can result in contamination from gray and black water (sewage). The potential for spills from portable fuel containers also exists when RV owners top-off fuel tanks in vehicles and boat motors or drain fuel at the end of the recreational season. A periodic visual inspection program for leaks and spills coupled with the use of drip pans and the rapid cleanup of any spill incidents is strongly encouraged. Such a program will reduce the potential for serious contamination of soils, surface runoff.	We agree with the recommendation. Best management practices would be implemented at the Outdoor Recreation Equipment Rental Facility.
Colorado Department of Public Health and Environment (10 March 2004)		
5	The location of the Proposed Action (Figure 2-1) is potentially in the down range footprint of the former Skeet Range and there needs to be a mention of this in the Environmental Assessment. The Air Force has conducted a custodial action for lead shot and target debris on the portion of the former skeet range to be occupied by the new base headquarters. Are any similar activities needed for the proposed action area?	The location of the Proposed Action is potentially in the down range footprint of the former skeet range. A review of aerial photos from 1942 to 1982 revealed that a large borrow area immediately east of the skeet range was created as late as 1959. Apparently, surface soil from much of the eastern side of the shot fall zone was borrowed. Then in 2001, a 100-foot wide road, Aspen Street, was constructed across the former range, approximately at the western boundary of the borrow area. During Spring 2003

SECTION 6.0

DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED

Comment Number	Agency Comment	BAFB Response
		<p>soil sampling activities associated with the Wing Headquarters custodial action, a soil sample was collected east of Aspen Street (in the vicinity of the location of the Proposed Action). This soil sample was collected from 0 to 6 inches deep and no shot was screened from the sample.</p> <p>It has been concluded that the removal of soil from the borrow area removed any potentially existing lead shot from the location of the Proposed Action. Therefore, there is no need for a custodial action (similar to that at the Wing Headquarters location) on the portion of the former skeet range to be occupied by the new outdoor recreation equipment rental facility.</p>
Colorado Division of Wildlife (15 March 2004)		
6	If prairie dogs are on site we would recommend the following: we recommend that the prairie dogs be either removed alive to another location or humanely killed before any earth-moving occurs; and	Our current protocols for prairie dogs and burrowing owls follow your recommended procedures
7	Since burrowing owls use prairie dog towns and live in prairie dog holes, the following should be observed: If construction is to occur between March 1 and October 31, we suggest that the area be checked for the presence of burrowing owls prior to any earth-moving taking place. The owls are susceptible to being buried and killed in their holes by construction activity. They are protected by law and killing one is illegal. If construction is done between November 1 and February 28, it is very unlikely that owls would be present since they migrate out of state during the winter.	Comment noted.
U.S. Environmental Protection Agency (18 March 2004)		
8	No specific comments.	Comment noted.

SECTION 6.0
DISTRIBUTION LIST AND AGENCIES AND INDIVIDUALS CONTACTED

Comment Number	Agency Comment	BAFB Response
Metro Wastewater Reclamation District (31 March 2004)		
9	Section 2.2.2, page 2-5, of the EA describes the actions planned to be taken by Buckley Air Force Base (BAFB) to comply with requirements contained in BAFB's wastewater discharge permit., particularly those related to the potential discharge of chlorinated water used to disinfect the potable water supply piping in the new outdoor recreation equipment rental facility. Depending on the wastewater volume and the chlorine concentration, the Metro District may require BAFB to dechlorinate the wastewater prior to discharge to the sanitary sewer system. Please contact Kevin Wegener with the City of Aurora to discuss any additional concerns or requirements of the City of Aurora.	Your comments regarding contacting Mr. Wegener with the City of Aurora were forwarded to our Chief of Compliance and Water Program Manager.
10	Section 2.2.3, page 2-5, of the EA includes a description for a planned wash pad and Section 4.2.2.2, page 4-5 addresses impacts to the stormwater and sanitary sewer from construction of the proposed facility. However, it is unclear how BAFB plans to segregate plain wash water and storm water from other wastewaters (steam cleaning, containing detergents, etc.) and route these wastewaters without installing a canopy and waste pipe valving to direct wastewater flows to the storm water system or the sanitary sewer system.	We agree with your comment. We understand that stormwater discharge to the sanitary sewer is prohibited. The EA will state that the final design would include wither a roof of diversion valves to keep stormwater from going directly to the sanitary sewer.

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SECTION 7.0
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SECTION 8.0 ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
ABW	Air Base Wing
ACM	asbestos-containing material
AFI	Air Force Instruction
AICUZ	Air Installation Compatible Use Zone
APCD	Air Pollution Control Division
AQCR	Air Quality Control Region
BAFB	Buckley Air Force Base
BANGB	Buckley Air National Guard Base
BMP	best management practice
CAA	Clean Air Act
CDOW	Colorado Division of Wildlife
CDPHE	Colorado Department of Public Health and Environment
CE	civil engineering
CEQ	Council on Environmental Quality
CES	Civil Engineering Squadron
CEVP	Environmental Management
CFR	Code of Federal Regulations
CO	carbon monoxide
dB	decibel
dba	A-weighted decibel level
DNL	day-night average sound level
DOD	Department of Defense
EA	environmental assessment
EDR	Environmental Data Resources, Inc.
EIA	Energy Information Administration
EIAP	Environmental Impact Analysis Process
EIS	environmental impact statement
ERP	Environmental Restoration Program
FEMA	Federal Emergency Management Agency
FICON	Federal Interagency Committee on Noise
FONSI	finding of no significant impact
FY	fiscal year
$\text{g}/\text{m}^2\text{s}$	grams per square meter per second
HAP	hazardous air pollutants
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NAF	non-appropriated funds
NEPA	National Environmental Policy Act
NO_x	nitrous oxides
NOI	notice of intent

SECTION 8.0
ACRONYMS AND ABBREVIATIONS

NPDES	National Pollutant Discharge Elimination System
O ₃	ozone
ODS	ozone-depleting substance
pCi/l	pico-Curies per liter
PM ₁₀	particulate matter measuring less than 10 microns in diameter
ROI	region of influence
RV	recreational vehicle
SBIRS	space-based infrared surveillance
SF	square feet
SO ₂	sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
TSP	total suspended particulate
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USC	U.S. Code
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
WECC	Western Electricity Coordinating Council

APPENDIX A

USAF FORM 813

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REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS		Report Control Symbol CRWU03009			
INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on Separate Sheets as necessary. Reference appropriate item number(s).					
SECTION I - PROPONENT INFORMATION					
1. TO (Environmental Planning Function) 460 CES/CEV		2. FROM (Proponent organization and functional address symbol) 460 CES/CECP			
		2a. TELEPHONE NO. 303-677-6819			
3. TITLE OF PROPOSED ACTION Leadership Development Center					
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date). Provide active duty members and civilian employees with quality of life support and access to training equipment that would enhance their fitness level. Facility will also provide an area to store and maintain NAF equipment.					
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPPA) (Provide sufficient details for evaluation of the total action). See attached.					
6. PROPONENT APPROVAL (Name and Grade) Charles Nicely, GS-11		6a. SIGNATURE 			
		6b. DATE 30 Jan 04			
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = Unknown effect.			+ 0 - U		
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)			X		
8. AIR QUALITY (emissions, attainment status, state implementation plan, etc.) Fugitive dust during construction;			X		
9. WATER RESOURCES (Quality, quantity, source, etc.) Stormwater during and after construction			X		
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, etc.) Safety During construction			X		
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.) Use of hazardous materials during construction.			X		
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, flora, fauna, etc) Potential adverse effects to prairie dogs and/or burrowing owls.			X		
13. CULTURAL RESOURCES (Native American burial sites, archeological, historical, etc.)			X		
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)			X		
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.) Assuming the additional employees currently reside in the local commuting area.			X		
16. OTHER (Potential impacts not addressed above.)			X		
SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION					
17. <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 50px; text-align: center;">PROPOSED ACTION QUALIFIES FOR A CATEGORICAL EXCLUSION (CATEX #) _____; OR</td> </tr> <tr> <td style="text-align: center;">X</td> </tr> </table> PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.				PROPOSED ACTION QUALIFIES FOR A CATEGORICAL EXCLUSION (CATEX #) _____; OR	X
PROPOSED ACTION QUALIFIES FOR A CATEGORICAL EXCLUSION (CATEX #) _____; OR					
X					
18. REMARKS					
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) Elise L. Sherva, GS-12		19a. SIGNATURE 			
		19b. DATE 30 Jan 04			

AF Form 813 Continuation

Project Title: Outdoor Recreation Equipment Rental

Proposed Action: Construct a new 9,300 SF Outdoor Recreation Equipment Rental Facility. This facility will be used for renting, storing and maintaining equipment used for recreational activities such as: biking, hiking, camping, backpacking and skiing.

Alternative Action1: Use the existing Fitness Center. The existing fitness center is being replaced by a new facility.

No Action Alternative: Personnel will be limited by the types of equipment they can economically rent since current space is inadequate.

APPENDIX B

REPRESENTATIVE PHOTOGRAPHS

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Photograph 1: Recreational Vehicle (RV) Storage Area



Photograph 2: RV Storage Area



Photograph 3: RV Parked East of Aspen Avenue



Photograph 4: Current Outdoor Recreation Facilities



Photograph 5: Canoe Storage



Photograph 6: Trailer Storage



Photograph 7: Trailer Storage



Photograph 8: Camping Trailer Storage



Photograph 9: Building 1011



Photograph 10: Building 1011



Photograph 11: Building 1011



Photograph 12: Building 1011



Photograph 13: Proposed Site Looking NE



Photograph 14: Proposed Site Looking E



Photograph 15: Proposed Site Looking SW



Photograph 16: Portable Bleacher Storage

APPENDIX C

NOTICE OF AVAILABILITY AND AFFIDAVIT OF PUBLICATION

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THE Denver Newspaper Agency
DENVER, CO

PUBLISHER'S AFFIDAVIT

City and County of Denver,
STATE OF COLORADO, SS.

Jean Birch
..... being of lawful
age and being first duly sworn upon oath, deposes and says:
Legal Advertising Reviewer
That he/she is the
Of The Denver Newspaper Agency, publisher of the Denver Post and
Rocky Mountain News, daily newspapers of general Circulation published
and printed in whole or in part in Denver, in the County of Denver and
State of Colorado, and that said newspaper was Prior to and during
all the time hereinafter mentioned duly qualified For the publication of
legal notices and advertisements within the Meaning of an Act of the
General Assembly of the State of Colorado,
Approved April 7, 1921, as amended and approved March 30, 1923;
And as amended and approved March 5, 1935, entitled "An Act
Concerning Legal Notices, Advertisements and Publications and the
Fees of printers and publishers thereof, and to repeal all acts and parts
Of acts in conflict with the provision of this Act" and amendments
Thereto:

That the notice, of which the annexed is a true copy, was published in
The said newspaper to wit: (dates of publication)
..... February 29, 2004
.....
Signature Jean Birch

Subscribed and sworn to before me this 2 day
Of MARCH A.D. 2004.

Susan Sloan
.....
Notary Public.

My commission expires 8/15/06



Notice of Availability

Interested parties are hereby notified that Buckley Air Force Base (BAFB) has prepared a Draft Environmental Assessment (EA) and a Draft Finding of No Significant Impact (FONSI) for the proposed construction and operation of an outdoor recreation equipment rental facility at BAFB, Colorado.

Statutory Authority. This notice is being issued to interested parties in accordance with the National Environmental Policy Act (Public Law [PL] 91-190; 42 United States Code 4321 et seq.) as amended in 1975 by PL 94-52 and PL 94-83.

Purpose. In order to meet the requirements of Air Force Instruction (AFI) 34-262, *Service programs and Use and Eligibility*, and AFI 34-110, *Air Force Outdoor Recreation Programs*, BAFB must maintain a properly sized and functioning outdoor recreation equipment rental facility. This facility would include equipment rental and non-appropriated funds central storage, which is needed at BAFB to allow military personnel to take advantage of the many outdoor recreation opportunities available in Colorado. Currently, outdoor recreation equipment rental services are located in multiple temporary facilities on BAFB with no central customer service point. This makes it difficult for military personnel, their dependents, and retirees to find the equipment they would like to loan or rent. Additionally, the current lack of storage space for rental recreation equipment severely limits the types of equipment that can be made available to military personnel, their dependents, and retirees. The proposed action and alternatives included (1) construction and operation of an outdoor recreation equipment rental facility located between Buildings 806 and 1005 (Proposed Action); (2) construction and operation of an outdoor recreation equipment rental facility adjacent to Building 1005 (Alternative 1); (3) adaptive reuse of an existing facility (Alternative 2); (4) locating the outdoor recreation equipment rental facility off-base (Alternative 3); (5) locating the outdoor recreation equipment rental facility near the Main Gate (Alternative 4); (6) locating the outdoor recreation equipment rental facility near Williams Lake (Alternative 5); and (7) the no action alternative.

Comments: Comments on the Draft EA should be directed to Elise Shervs, 460 CES/CEVP, 660 S. Aspen Street (Stop 86), Bldg. 1005, Room 254, Buckley AFB, Colorado 80011-9551 (303) 677-9077. The comment period is open for 30 days from 29 February 2004 following the publication of this notice in a general circulation newspaper. Copies of the Draft EA are available for review by the public at the Aurora Central Library, 14949 E. Alameda Drive, Aurora, Colorado 80012 and the Denver Public Library, Government Documents Section, 10 West 14th Avenue, Denver, Colorado, 80204. Copies may also be obtained by writing to BAFB at the address listed above.

APPENDIX D

INTERAGENCY COORDINATION LETTERS

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DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Susan Linner
Colorado Field Supervisor
U.S. Fish and Wildlife Service
755 Parfet Street, Suite 361
Lakewood CO 80215

Dear Ms. Linner

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. The Draft EA and Draft FONSI are attached for your information, review, and comment, to include review per Section 7 of the Endangered Species Act.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV
660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely

A handwritten signature in cursive script, appearing to read "C. McLane", is positioned above the printed name.

CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Eugene Jansak
Industrial Waste Specialist
Metro Wastewater Reclamation District
6450 York Street
Denver CO 80229-7499

Dear Mr. Jansak

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV
660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Eliza Moore
Wildlife Manager
Colorado Division of Wildlife
6060 South Broadway
Denver CO 80216

Dear Ms. Moore

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

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660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Cynthia Cody
NEPA Unit Chief
U.S. Environmental Protection Agency, Region 8
999 18th Street, Suite 500
Denver CO 80202

Dear Ms. Cody

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

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Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Jennifer Lane
U.S. Environmental Protection Agency, Region 8
999 18th Street, Suite 500
Denver CO 80202

Dear Ms. Lane

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

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660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

David Rathke
U.S. Environmental Protection Agency, Region 8
999 18th Street, Suite 500
Denver CO 80202

Dear Mr. Rathke

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

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660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely

A handwritten signature in black ink, appearing to read "Ch C McLane", is positioned above the printed name.

CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Denise Balkas
Director of Planning
City of Aurora
15151 East Alameda Parkway
Aurora CO 80012

Dear Ms. Balkas

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

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660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Ed LaRock
Federal Facilities HMWM 2800
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive, South
Denver CO 80246-1530

Dear Mr. LaRock

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

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660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Brad Beckman
Manager Environmental Planning
Colorado Department of Transportation
4201 East Arkansas Avenue
Denver CO 80222

Dear Mr. Beckman

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV
660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

James Ives, C.E.P.
Planning, Environmental Division
City of Aurora
15151 East Alameda Parkway
Aurora CO 80012

Dear Mr. Ives

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV
660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely

A handwritten signature in dark ink, appearing to read "Chp C McLane", is positioned above the printed name.

CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 S. Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Georgianna Contiguglia
State Historic Preservation Officer
Colorado History Museum
1300 Broadway
Denver CO 80203-2137

Dear Ms. Contiguglia

The Air Force has prepared a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the construction and operation of an outdoor recreation equipment rental facility. The proposed action is required to provide equipment rental services in a convenient location for active, reserve, and retired military personnel and their dependants. A copy of the Draft EA and Draft FONSI are enclosed for your review and comment.

The Air Force has determined that the proposed action or alternatives would not have adverse impacts on archaeological or historical resources per Section 106 consultation, per the National Historic Preservation Act (see letter dated 22 Jan 04). Please provide written comments within 30 calendar days of receipt of this letter to:

460 CES/CEV
660 S Aspen Street, Stop 86
Buckley AFB CO 80011-9551

If you have any questions please feel free to contact Ms. Elise Sherva at 303-677-9077, email: elise.sherva@buckley.af.mil or Ms. Janet Wade at 303-677-9977, email: janet.wade@buckley.af.mil.

Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

Attachments:
Draft EA
Draft FONSI



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

JAN 22 2004

Lt Col Christopher C. McLane
460th Civil Engineer Squadron
660 South Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Georgianna Contiguglia
State Historic Preservation Officer
Colorado History Museum
1300 Broadway
Denver CO 80203-2137

Dear Ms. Contiguglia

The Air Force is preparing an Environmental Assessment for the construction and operation of a new Outdoor Recreation Rental Facility. The proposed action is required to meet mission requirements and needs. The proposed action is the construction and operation of a new consolidated fenced compound that would include an approximately 9,000 square foot main building, 1,000 square feet in covered storage, and 5,000 square feet in outdoor storage, parking for rental RV's, employees, and customers. The alternative action, which is also the no action alternative, is to continue using existing buildings (Building 1011 and Modular 2). The attached figures show the locations of the Proposed Action and the No Action Alternative.

In compliance with Section 106 of the National Historic Preservation Act, Buckley Air Force Base has determined that the proposed action, and alternatives, would not have an adverse affect on historic properties. There are no known archaeological or historic structure resources in, or near, the proposed or alternative locations. Building information, with the dates of construction in parenthesis, is outlined below.

Proposed Action Location:

- Building 1011 (1942): Determined ineligible for listing on the National Register of Historic Places per previous correspondence, dated 16 Nov 2001.
- Building 1012 (1967): Is not eligible for listing on the National Register of Historic Places since it is less than 50 years old.
- Facility 11661 (1996): Pad for dangerous cargo

- Buildings 806 (1996), 1000 (1990), 1001 (1998), 1002 (2000), 1003 (1999), 1004 (1990), 1005 (1994), 1006 (1998), 1007 (1994), 1008 (1994), 1009 (1996), 1010 (1999), 1013 (2002), 1014 (2002 – originally planned as an addition to building 1007), 1015 (under construction), and Mod 5 (2002) were constructed or in place after 1990. Therefore, they are not eligible for inclusion on the National Register of Historic Places.

Existing, or No Action Alternative Location:

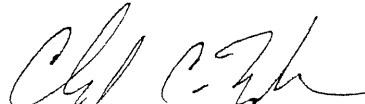
- Modular 2 (T-12): Temporary structure that was installed in 2000.
- Building 1011. Portions of this building are currently being used for storage. Was determined to be ineligible for inclusion on the National Register of Historic Places per formal consultation with your office.

Please provide written comments and/or concurrence to:

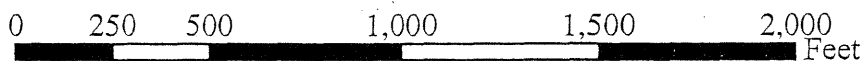
Elise Sherva
460 CES/CEVP
660 S. Aspen Street, Mail Stop 86
Buckley AFB CO 80011-9551



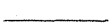

If you have any questions please feel free to contact Ms. Elise Sherva, Environmental Planning Chief at 303-677-9077, email elise.sherva@buckley.af.mil or Ms. Janet Wade, Environmental Flight Chief at 303-677-9977, email janet.wade@buckley.af.mil.

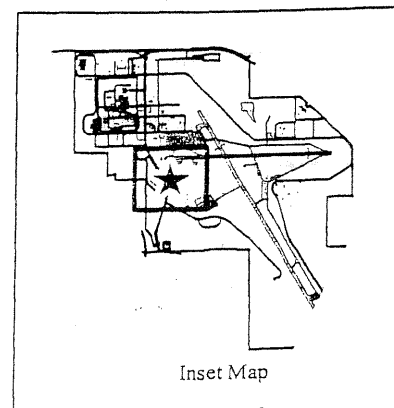
Sincerely


CHRISTOPHER C. McLANE, Lt Col, USAF
Base Civil Engineer

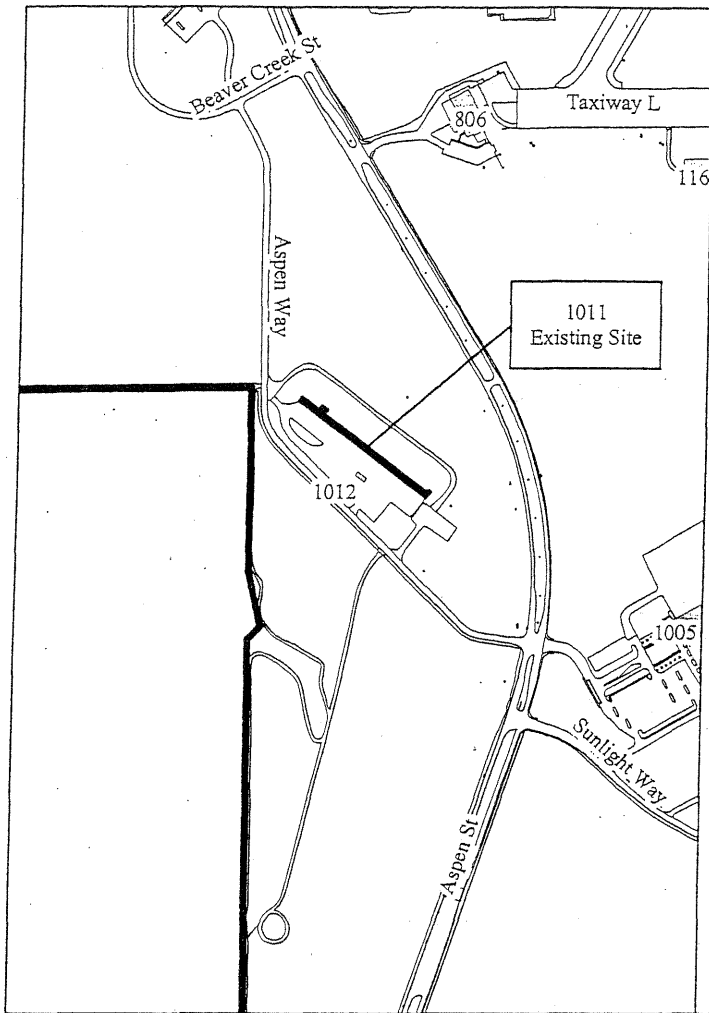
Attachment
Location figures



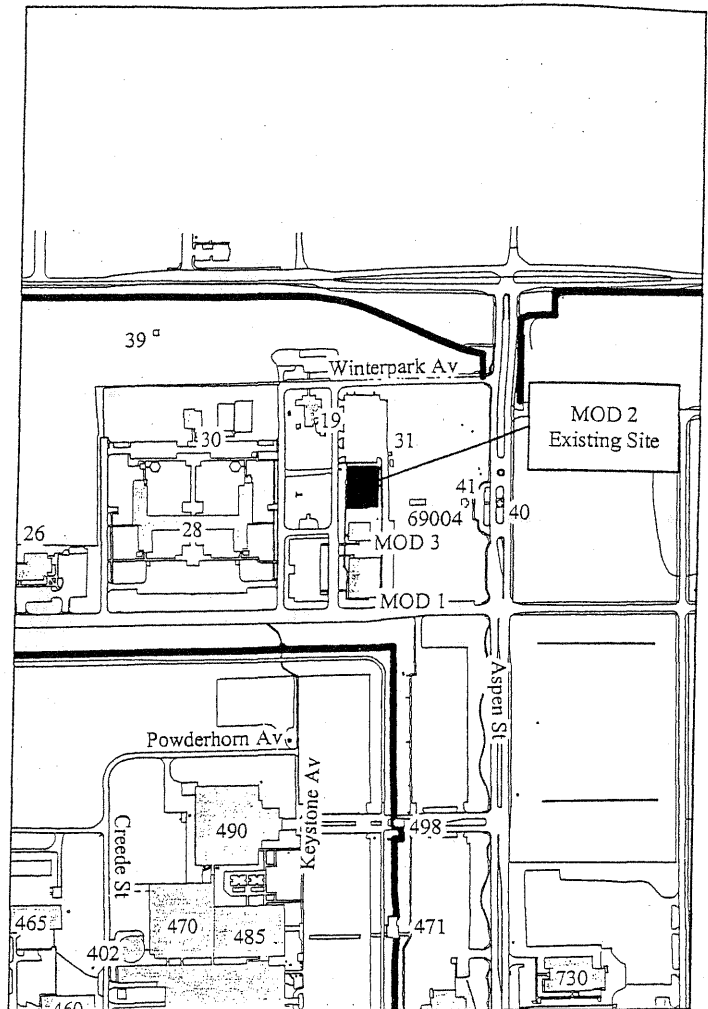
-  Proposed Outdoor Recreation Center Area
-  Existing Structures
-  Transportation Network
-  Fence Line



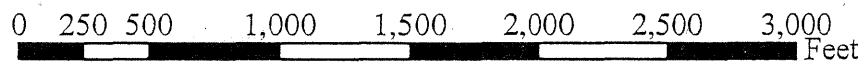
Proposed Outdoor Recreation Center Buckley AFB, CO






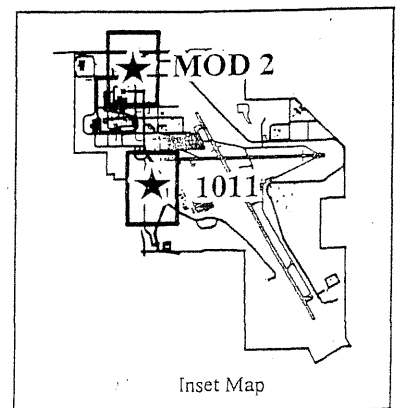
Building 1011



MOD 2



-  Buildings
-  Transportation Network
-  Fence Line



Alternate Proposed Outdoor Recreation Center Sites Buckley AFB, CO

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Georgianna Contiguglia
Colorado State Historic Preservation Officer
Colorado History Museum
1300 Broadway
Denver CO 80203-2137

2. Article Number (Copy from service label)

7003 1680 0002 6809 7616

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

S. Verrelli, Cym 12/4/0

C. Signature

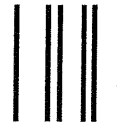
X ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

UNITED STATES POSTAL SERVICE



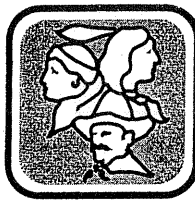
First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

- Sender: Please print your name, address, and ZIP+4 in this box •

460 CES/CEVP
660 S. Aspen St, (Stop 86)
Buckley AFB CO 80011-9551

OFFICIAL BUSINESS

ref: Outdoor Rec SHPO



COLORADO
HISTORICAL
SOCIETY

The Colorado History Museum 1300 Broadway Denver, Colorado 80203-2137

January 29, 2004

Lt. Col. Christopher C. McLane
460th Civil Engineer Squadron
18401 East A-Basin Avenue (Stop 86)
Buckley AFB, CO 80011-9524

Re: Environmental Assessment for the construction of a new Outdoor Recreation Rental Facility. (CHS #42439)

Dear Lt. Col. McLane,

Thank you for your correspondence received by our office on January 21, 2004 regarding the above-mentioned project.

After reviewing the submitted information, staff was unable to complete the Section 106 review process. Staff reviewed the Buckley AFB Draft Historic Building Inventory Report and did not locate an inventory form for Building 1012. Please complete an inventory form for Building 1012 so that the staff may be able to evaluate the building for National Register eligibility.

Our office concurs with your finding of not eligible for the remaining buildings listed in the project letter.

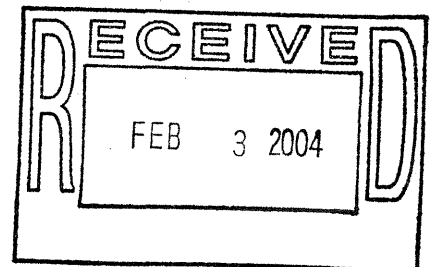
Once the additional information has been received, staff will be able to complete the effects assessments of the project under Section 106.

If we may be of further assistance, please contact Amy Pallante, our Section 106 Compliance Coordinator, at (303) 866-4678.

Sincerely,

for Georgianna Contiguglia
State Historic Preservation Officer

cc: Elise Sherva, Buckley AFB



APPENDIX E

COMMENTS AND RESPONSES TO COMMENTS

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**METRO WASTEWATER
RECLAMATION DISTRICT**

6450 York Street - Denver, Colorado 80229-7499
(303) 286-3000 Telefax (303) 286-3030
www.metrowastewater.com

Samuel J. Atwood, Chairman of the Board
Anthony G. Ferraro, Chairman Pro Tem
Kathryn E. Jensen, Secretary
Ralph H. Mitchell, Treasurer

Robert W. Hite, District Manager

March 31, 2004

Ms. Elise Sherva, Environmental Planning Chief
460 CES/CEVP
660 S. Aspen Street, Stop 86
Buckley Air Force Base, CO 80011-9551

Dear Ms. Sherva:

RE: Comments to the Draft Environmental Assessment For the Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley Air Force Base

Thank you for the opportunity to comment on this draft Environmental Assessment (EA). The Metro Wastewater Reclamation District (Metro District) has the following comments:

- Section 2.2.2, page 2-5, of the EA describes the actions planned to be taken by Buckley Air Force Base (BAFB) to comply with requirements contained in BAFB's wastewater discharge permit, particularly those related to the potential discharge of chlorinated water used to disinfect the potable water supply piping in the new outdoor recreation equipment rental facility. Depending on the wastewater volume and the chlorine concentration, the Metro District may require BAFB to dechlorinate the wastewater prior to discharge to the sanitary sewer system. Please contact Kevin Wegener with the City of Aurora at 303-739-7370 to discuss any additional concerns or requirements of the City of Aurora.
- Section 2.2.3, page 2-5, of the EA includes a description for a planned wash pad and Section 4.2.2.2, page 4-5 addresses impacts to the stormwater and sanitary sewer from construction of the proposed facility. However, it is unclear how BAFB plans to segregate plain wash water and storm water from other washwaters (steam cleaning, containing detergent, etc.) and route these wastewaters without installing a canopy and waste pipe valving to direct wastewater flows to the storm water system or the sanitary sewer system.

If you have any questions regarding these comments, please call me at 303-286-3447.

Sincerely,

Eugene Jansak
Industrial Waste Specialist

EJ/bc
M:\BAFB Outdoor Rec Equip EA Comments_epj.doc



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Wayne E. Marusin
Deputy Commander
460 CES/CD
660 South Aspen Street, Stop 86
Buckley AFB CO 80011-9551

JUL 08 2004

Eugene Jansak
Industrial Waste Specialist
Metro Wastewater Reclamation District
6450 York Street
Denver CO 80229-7449


Dear Mr. Jansak

Thank you for your comment letter dated 31 Mar 04 on the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact for Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley AFB. Your comments regarding contacting Mr. Wegener with the city of Aurora were forwarded to our Chief of Compliance and Water Program Manager.

Comment #2 - Section 2.2.3, page 2-5 and Section 4.2.2.2, page 4-5. We understand that stormwater discharge to the sanitary sewer is prohibited. The EA will state that the final design would include either a roof or diversion valves to keep stormwater from going directly to the sanitary sewer. The following text was added to the EA: "Outdoor areas associated with the facility include a wash pad, a small flammable materials storage locker (containing no more than 50 gallons of gasoline stored in one- or five-gallon containers), and a dump station for RV wastewater." Water from the wash pad would be routed into the sanitary sewer system for treatment. The wash pad would contain run-on controls, such as curbing, to minimize untreated flows into the storm sewer system. The final design of the wash pad would contain a roof or diversion valves to keep stormwater out of the sanitary sewer system. The storage locker would be located in an area containing secondary containment measures. If unexpected spills occur in the outdoor storage area or RV parking area spill containment measures would be implemented which would include stopping the spill, cleaning any contaminated surfaces, and removing any contaminated materials. BMPs would be implemented to minimize any incidental contaminants from reaching the storm sewer system or surface water areas."

If you have any questions please feel free to contact Ms. Elise Sherva, NEPA Program Manager, at 720-847-9077, email elise.sherva@buckley.af.mil or Ms. Janet Wade, Environmental Flight Chief, at 720-847-9977, email janet.wade@buckley.af.mil.

Sincerely,



WAYNE E. MARUSIN, GS-13, DAFC
Deputy Commander

cc

460 CES/CEVQ (Ron Lancaster)

460 CES/CEVQ (Eric Farrington)

Spangler Mark E Civ 460 CES/CEVR

From: ED J LAROCK [ed.larock@state.co.us]
Sent: Wednesday, March 10, 2004 1:44 PM
To: elise.sherva@BUCKLEY.AF.MIL
Cc: Mark.Spangler@BUCKLEY.AF.MIL; Rathke.David@epamail.epa.gov
Subject: EA recreation rental facility

Dear Elise,

I have reviewed the Environmental Assessment for the Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley Air Force Base, Colorado dated February 2004 and received February 27, 2004.

Based on my review I have the following comment:

The location of the Proposed Action (Figure 2-1) is potentially in the down range footprint of the former Skeet Range and there needs to be a mention of this in the Environmental Assessment. The Air Force has conducted a custodial action for lead shot and target debris on the portion of the former skeet range to be occupied by the new base headquarters. Are any similar activities needed for the proposed action area?

Thank you for the opportunity to comment. If you require this comment in a letter, please let me know.
sincerely,

Ed LaRock
Hazardous Materials and Waste Management Division
Colorado Dept. of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530
303-692-3324
Fax 303-759-5355
ed.larock@state.co.us



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

JUL 08 2004

Wayne E. Marusin
Deputy Commander
460 CES/CD
660 South Aspen Street, Stop 86
Buckley AFB CO 80011-9551

Ed LaRock, Environmental Protection Specialist
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
Denver CO 80246

Dear Mr. LaRock

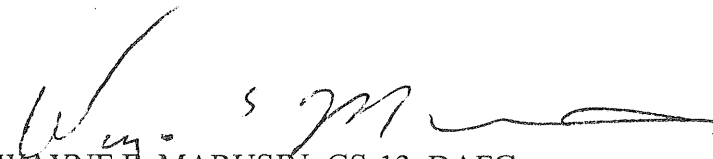
Thank you for your comments, which were dated 10 March 2004, on the Draft Environmental Assessment and Draft Finding of No Significant Impact for Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley AFB.

The location of the Proposed Action is potentially in the down range footprint of the former skeet range. A review of aerial photos from 1942 to 1982 revealed that a large borrow area immediately east of the skeet range was created as late as 1959. Apparently, surface soil from much of the eastern side of the shot fall zone was borrowed. Then in 2001, a 100-foot-wide road, Aspen Street, was constructed across the former range, approximately at the western boundary of the borrow area. During spring 2003 soil sampling activities associated with the Wing Headquarters custodial action, three of the sixteen shot screening soil samples were collected from within that borrow area - two on the west of Aspen Street and one on the east, in the vicinity of the Proposed Action. No shot was screened from the three borrow area samples or from the soil sample collected east of Aspen Street (at a depths from 0 to 6 inches).

It has been concluded that the removal of soil from the borrow area removed any potentially existing lead shot from the location of the Proposed Action. Therefore, there is no need for a custodial action (similar to that at the Wing Headquarters location) on the portion of the former skeet range to be occupied by the new outdoor recreation equipment rental facility.

Please contact Ms. Elise Sherva at 720-847-9077, email elise.sherva@buckley.af.mil if you have any questions or require further information.

Sincerely,



WAYNE E. MARUSIN, GS-13, DAFC
Deputy Commander

Bill Owens, Governor

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

AN EQUAL OPPORTUNITY EMPLOYER

Bruce McCloskey, Acting Director
6060 Broadway
Denver, Colorado 80216
Telephone: (303) 297-1192



*For Wildlife
For People*

March 15, 2004

Elise Sherva
460 CES/CEV
660 S. Aspen Street, Stop 86
Buckley AFB, CO 80011-9551

RE: Draft Environmental Assessment and Draft Finding of No Significant Impact for the proposed construction of an outdoor recreation equipment rental facility at Buckley Air Force Base.

Dear Ms. Sherva:

Thank you for the opportunity to comment on the proposed construction of an outdoor recreation equipment rental facility at Buckley Air Force Base (BAFB). The proposed facility will consist of approximately 9,000 square feet. A covered storage area of approximately 1,000 square feet and a visitor parking area of approximately 5,000 square feet will also be constructed.

While we have not recently visited the site, the majority of currently undeveloped land at BAFB consists primarily of fragmented habitat surrounded by development. Noxious weeds such as thistle and knapweed have also been found in past visits. The Division would expect to find a variety of small ground-dwelling mammals, ground-nesting birds, red fox, coyotes, and passerine birds at the proposed site. These animals are capable of moving to the undisturbed habitat surrounding the proposed site. If prairie dogs are present we would recommend the following:

- We recommend that the prairie dogs be either removed alive to another location or humanely killed before any earth-moving occurs; and
- Since burrowing owls use prairie dog towns and live in prairie dog holes, the following should be observed:
 - If construction is to occur between March 1 and October 31, we suggest that the area be checked for the presence of burrowing owls prior to any earth-moving taking place. The owls are susceptible to being buried and killed in their holes by construction activity. They are protected by law and killing one is illegal.
 - If construction is done between November 1 and February 28, it is very unlikely that owls would be present since they migrate out of state during the winter.

Our goal at the Colorado Division of Wildlife (CDOW) is to provide complete, consistent and timely information to all entities who request comment on matters within our statutory authority and our mission – which is to protect, preserve, enhance and manage wildlife and their environment for the use, benefit and enjoyment of the people of Colorado and its visitors. Currently, CDOW policy directs our efforts towards proposals that will potentially have high impacts to wildlife and wildlife habitat. The emphasis of the Division's concerns is on large acreages, critical

DEPARTMENT OF NATURAL RESOURCES, Russell George, Executive Director
WILDLIFE COMMISSION, Philip James, Chair • Jeffrey Crawford, Vice-Chair • Brad Phelps, Secretary
Members, Bernard Black • Tom Burke • Rick Enstrom • Claire O'Neal • Robert Shoemaker • Ken Torres
Ex Officio Members, Russell George and Don Ament

habitats, wildlife diversity, and impacts to species of special concern, or those that are state or federally endangered. Due to the small acreage and unavailability of undisturbed habitat adjacent to the proposed site, impacts of the proposed construction may be characterized as minimal.

This may not mean that the property has no value to wildlife or value to the community. It is important to remember that incremental and cumulative loss of natural areas and open spaces will, over time significantly degrade the overall quality of wildlife habitat in the area. However, because this site has low value as wildlife habitat, we do not have additional recommendations for the development of this property.

If you have further questions, please contact District Wildlife Manager Joe Padia at (303)291-7162.

Sincerely,

A handwritten signature in dark ink, appearing to read "Scott Hoover". The signature is fluid and cursive, with the first name "Scott" and last name "Hoover" clearly distinguishable.

Scott Hoover
NE Region Manager



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Wayne E. Marusin
Deputy Commander
460 CES/CD
660 South Aspen Street, Stop 86
Buckley AFB CO 80011-9551

JUL 08 2004

Scott Hoover
NE Region Manager
Colorado Division of Wildlife
6060 Broadway
Denver CO 80216

Dear Mr. Hoover

Thank you for your letter dated 15 March 2004 on the Draft Environmental Assessment and Draft Finding of No Significant Impact for Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley AFB. Our current protocols for prairie dogs and burrowing owls follow your recommended procedures.

Please contact Ms. Elise Sherva at 720-847-9077, email elise.sherva@buckley.af.mil if you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne E. Marusin", is written over a horizontal line.

WAYNE E. MARUSIN, GS-13, DAFC
Deputy Commander

Planning Department
15151 E. Alameda Parkway
Aurora, Colorado 80012
Phone: 303-739-7250
Fax: 303-739-7268
www.auroragov.org



March 10, 2004

Ms. Elise Sherva
Conservation Chief
460 CES/CEVP
660 S. Aspen Street, Stop 86
Building 1005, Room 254
Buckley AFB, CO 80011-9551

Dear Ms. Sherva:

RE: Comments on Draft EA for Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at BAFB

The staff for the City of Aurora, Colorado has reviewed the above-referenced document and has the following comments on the Draft Environmental Assessment (EA) for the Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley Air Force Base (BAFB):

General Comments:

Staff concurs with the assessment that no significant environmental impacts will result from the construction and operation of the proposed facility. Staff did remark that this document was one of the more accurate and well-written EAs prepared by BAFB contractors of the past year.

However as we have indicated previously, the base appears to be continuing with a piecemeal approach in conducting the environmental assessments of multiple construction projects on the base. To date this year alone, the City has received four separate draft EA documents for review and comment. There is the potential that some cumulative impacts may not be adequately evaluated when each project is considered individually.

Specific Comments:

- The main hazardous materials and water quality issues addressed in the document include the construction and operation of an RV dump station, a vehicle wash pad, and a gasoline storage tank. Measures to protect storm water from potential discharges from the dump station and wash pad appear to be adequate. The document states that wastewater from these operations will be discharged to

Ms. Elise Sherva

Page 2

Comments on Draft EA for Proposed Construction and Operation of an Outdoor
Recreation Equipment Rental Facility at BAFB

sanitary sewer in accordance with the discharge permit from the Metro Wastewater District. In addition, the proposed secondary containment around the gasoline tank appears to provide appropriate spill control.

- The proposed size of the gasoline tank should be stated in the document. The applicant should also discuss whether or not the tank needs to be registered with the Colorado Department of Labor & Employment, Oil Inspection Section.
- Gravel surfacing is proposed for the outdoor storage area, RV parking, and customer/employee parking. Spills and leaks are the largest industrial sources of storm water pollutants. This porous surfacing can increase the potential risk for soil, surface water and groundwater contamination. Dripping engine and automotive fluids from parked RV and other vehicles and equipment can result in localized contamination of soils and contribute to the contamination of surface runoff (storm water). Infiltration of storm water runoff may also contaminate groundwater. The vehicular leaks can include oil, gasoline, grease, hydraulic fluids, and antifreeze. In addition, leaks from RV wastewater systems, tanks, and drains can result in contamination from gray and black water (sewage). The potential for spills from portable fuel containers also exists when RV owners top-off fuel tanks in vehicles and boat motors or drain fuel at the end of the recreational season. A periodic visual inspection program for leaks and spills coupled with the use of drip pans and the rapid cleanup of any spill incidents is strongly encouraged. Such a program will reduce the potential for serious contamination of soils, surface runoff

Thank you for giving the City the opportunity to respond to the draft EA. We look forward to receiving the Final Environmental Assessment.

Sincerely,



Denise M. Balkas, A.I.C.P.
Director of Planning

DMB/jai

cc: Nancy Freed, Deputy City Manager of Operations
Jim Ives, Environmental Program Supervisor



DEPARTMENT OF THE AIR FORCE
460TH AIR BASE WING (AFSPC)

Wayne E. Marusin
Deputy Commander
460 CES/CD
660 South Aspen Street, Stop 86
Buckley AFB CO 80011-9551

JUL 08 2004

Denise M. Balkas
City of Aurora
Director of Plans
15151 E. Alameda Parkway
Aurora CO 80012

Dear Ms. Balkas

Thank you for your letter dated 10 March 2004, on the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for Proposed Construction and Operation of an Outdoor Recreation Equipment Rental Facility at Buckley AFB. Our responses follow:

1. Buckley AFB is preparing an EA that will cover all cumulative impacts. The timeline for this EA has slipped; however, we anticipate a Draft EA by September 2004. While this EA addresses cumulative impacts for past, present, and future construction projects, it will only serve as a Programmatic EA from which to tier future EA's. As stated in previous correspondence dated 24 June 2002, all attempts are made to include all projects into an annual EA; however, this is not feasible due to the following:

- Additional projects are identified that cannot be included in the present or future year EA's due to construction and/or funding timelines
- Tenant organizations program and pay for EAs for their own projects
- Funds received at different times of the year, as with non-appropriated versus appropriated funds.

2. Comment noted. We understand that you find the measures adequate and appropriate.


3. The EA will be modified as there will no longer be a gasoline storage tank. The following text was added to the EA: "Outdoor areas associated with the facility include a wash pad, a small flammable materials storage locker (containing no more than 50 gallons of gasoline stored in one- or five-gallon containers), and a dump station for RV wastewater." Water from the wash pad would be routed into the sanitary sewer system for treatment. The wash pad would contain run-on controls, such as curbing to minimize untreated flows into the storm sewer system. The final design of the wash pad would contain a roof or diversion valves to keep stormwater out of the sanitary sewer system. The storage locker would be located in an area containing secondary containment measures. If unexpected spills occur in the outdoor storage area or RV parking area, spill containment measures would be implemented, which would include stopping the spill, cleaning any contaminated surfaces, and removing any contaminated materials. BMPs would be

implemented to minimize any incidental contaminants from reaching the storm sewer system or surface water areas.”

4. We agree with the recommendation. Best management practices would be implemented at the Outdoor Recreation Equipment Rental Facility. See response to comment #3.

Please contact Ms. Elise Sherva at 720-847-9077, email elise.sherva@buckley.af.mil if you have any questions or require further information.

Sincerely,



WAYNE E. MARUSIN, GS-13, DAFC
Deputy Commander

